Cheshire County Council

Health Services 1971

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Cheshire County Council

Annual Report for 1971 by the County Medical Officer and Principal School Medical Officer

B G Gretton-Watson

MA MB B.Chir FFCM DPH Barrister at Law

STAFF AT 31.12.71

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	A. G. Stevenson
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INTRODUCTION

To THE CHAIRMAN AND MEMBERS OF THE COUNTY HEALTH COMMITTEE.

Mr. Chairman, Ladies and Gentlemen,

I present herewith my annual report for the administrative County of Cheshire for 1971, which deals solely with events taking place during that calendar year.

As the child and school health sections of the department have been combined administratively, that part of this report which is, as usual, being separately presented to the education committee, with its own introduction (pp. 97 ff.), now includes for the first time the pre-school child as well as the school child.

It is with great regret that we have to record the death of Alderman Fred McBirnie who was vice-chairman for 1959-67 and chairman of the ambulance sub-committee for 1958-1970. Alderman McBirnie's contribution to the work of the committee will be long remembered. During the year Dr. W. A. Pollitt joined the staff as an additional deputy.

The main event of the year, to which reference will be made later in more detail, was the handing over to the social services committee of a number of the functions of the health committee—several such functions had formerly constituted much of the work of the fifteen divisional health committees, and as a result of the change the divisional health committees were disbanded. I should like to thank all those who served for over twenty years on these committees for the valuable contribution they made, especially in forming a link between the county health committee and the various district councils.

The mid-1971 population was 1,113,560. The live births rate was 16.5 per thousand and showed a slight rise. Illegitimate births at 6% of all births remain unchanged; the infant mortality of 16 per thousand live births is equal to the previous low record. The death rate of 11 per thousand was lower than last year. The main causes of death remain ischaemic heart disease (marginally down on last year), cerebro-vascular accidents and the malignant diseases taken as a group. Deaths from bronchitis show a continuation of the slow downward trend—possibly due to the mildness of recent winters and progress made towards combating atmospheric pollution. For the first time, there have been no maternal deaths. There has been no case of smallpox for over ten years, and no case of poliomyelitis for four years. There was only one case each of typhoid and paratyphoid fever during the year.

The main effort of the department has continued to be directed to building up effective domiciliary medical and nursing teams, based either at health centres or in group practices. During the year six more health centres became operational and the task of attaching nursing staff to general practitioners neared completion by the end of the year. This process has demanded careful preparation, and of necessity has taken time, but the end is in sight so far as practices wholly within the administrative county are concerned. Cheshire has common boundaries with 13 other authorities, and practices which straddle these boundaries naturally present particular problems. Indeed same may need to wait for unification of the national health service in 1974 before they can be solved.

This report includes an account of functions handed to the social services department up to the date of transfer on April 1st—these were mental health, domestic helps, domiciliary services for the handicapped and the day care of the pre-school child. The Heswall adult training centre opened in January 1971 and the Bebington physically handicapped centre was completed in March 1971. I should like to take this opportunity of thanking those members of the staff transferred to the social services and education departments, for their loyalty and devotion to duty while in this department. In order that the new social services department should have appropriate medical advice from the health department, Dr. R. A. Blyth, formerly principal medical officer for mental health, has been attached part-time to the social services department. This ensured a close working relationship between the two departments. At the same time the administrative structure of the health department was altered appropriately and should be suitable until the major changes which are expected to take place in 1974. An

additional deputy was appointed mainly to deal with general management, divisional services, environmental health and the ambulance service. The former maternal and child health service has been divided. One section now deals with the planning of health centres, and another with family health matters such as cervical cytology, geriatrics, maternal deaths, and family planning; a combined section now deals with the health of both the pre-school and the school child.

Family planning has absorbed a great deal of the department's attention this year. Though widespread facilities are available—no town is without a service now—those in medical and social need do not often select themselves to attend. Clearly there is a need for a more active policy for searching out cases in need. With this end in view the health committee has authorised the provision of a domiciliary service, part of which is being financed under the urban development programme.

The main development in the nursing service has been the adoption of the Moystan management structure—in this connection the Department of Health and Social Security selected Cheshire as one of its model areas. Every effort has been made to bring together the nursing staffs of hospitals and of the domiciliary service. There will need to be a close working relationship between these two groups, particularly in the interests of enabling patients to be discharged from hospital as soon as they are well enough to be cared for at home. The year saw an increasing involvement of domiciliary midwives in the work of general practitioners' maternity units in hospitals.

A notable feature of the work of the department is its close link with a number of departments at Manchester university—there is a very satisfactory partnership in which the university provides back-up facilities for research and training, and this department provides the research material. On these lines links have been forged with the professors of community medicine, paediatrics, geriatrics, preventive dentistry, occupational health and the education of the deaf. The research officer is at present working part-time in the department of community medicine using material provided by this department. Subjects being investigated by the research section include screening of old people, the young chronic sick and home accidents.

The public health section has done valuable work and has brought its influence to bear on such planning matters as the tipping of industrial waste and such architectural matters as the design of kitchens. It has during the year produced or contributed to the production of "codes of practice" for controlling infection in swimming pools, and for county catering establishments, and one on pre-cooked frozen foods is at an advanced stage of preparation.

The occupational health service made further headway by the opening of a centre in Mid-Cheshire, carrying out medical examinations for heavy duty vehicle licences (surveyor's and fire brigade departments) and the examination of firemen over the age of 40—as agreed nationally.

The main change in immunisation policy was the abandonment of routine smallpox vaccination in infancy as recommended by the advisory committee to the Secretary of State. Much opinion, both medical and lay, was disturbed by this move, but the committee stressed that vaccination is still necessary for those at special risk and those travelling abroad.

During the year the ambulance service was faced with two large-scale emergencies—the Tattenhall rail crash in June and the M6 multiple crash in September. In each case the service gave a good account of itself, and valuable lessons were learnt, particularly problems of communication within the area of an emergency during fog.

The health education section has been concerned with such matters as home safety, venereal disease, family planning, cervical cytology, nutrition and dental health. The drugs study day is described in the introduction to the child health section.

In conclusion the year has been full of interesting developments, many of which have been aimed at shaping the department for a smooth transition into unification with the other two branches of the national health service in 1974.

My thanks are due to all who have contributed, including Dr. Doltan, Dr. Pollitt, Dr. Chesham (child health), Mr. Dowell (dental), Miss Wright-Worren (nursing), Mr. Glyn Janes (ombulonce) ond Mr. Pembleton (environmental health), and particularly to Mr. O'Connor who hos ogoin octed as editor.

I should like to thank the county health committee and particularly the choirman and deputy chairman for their constant support. My thanks are due to all the staff of the department, professional ond other, also the clerk of the county cauncil, the county treasurer and ather departmental heods for their continued co-operation and help.

B. G. GRETTON-WATSON,

June 1972. County Medical Officer.

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VITAL STATISTICS AND GENERAL

VITAL STATISTICS AND GENERAL

AREA

The area of the odministrative county ot the end af 1971 was 622,042 acres as colculated by the Ordnonce Survey for the Registrar Generol.

POPULATION

The population af the administrative county estimated by the Registrar General far mid-1971 wos 1,113,560.

RATEABLE VALUE

The roteoble value of the administrative county far general county rote purpases ot 1.4.71 was £50,021,615. A new penny rate for 1971-72 represented the sum af £485,971.

LIVE BIRTHS

	Male	Female	Total
Legitimate	8962	8366	17328
Illegitimate	557	531	1088
	9519	8897	18416

Birth rate per 1,000 populotion—16.5.

Illegitimate Live Births were 6 per cent of totol live births.

STILLBIRTHS

	Male	Female	Total
Legitimate	110	103	213
Illegitimate	3	7	10
	113	110	223

Stillbirths rate per 1,000 total (live and still) births, 12.

DEATHS

Male	Female	Total
6130	6072	12202

Death rate per 1,000 population—11.0.

The principal causes of death continued to be heart disease, malignant diseases, and voscular lesions of the nervous system.

INFANT MORTALITY

Number of deaths of infants:	Under 1 year	Neonatal Under 4 weeks	Early Neonatal Under 1 week
Legitimate	270	183	157
Illegitimote	28	16	15
Totol	298	197	172

Mortality rates per 1,000 live births:

	Infantile	Neonatal	Early Neonatal
Legitimate	16		
Illegitimate	26		
All Infants	16	11	9

PERINATAL DEATHS

Stillbirths	223
Deaths under 1 week (early neonatal)	172
Total perinatal deaths	395

The perinatal martality rate per 1,000 total (live and still) births was 21.

DEATHS FROM PUERPERAL CAUSES

Nil.

BUILDING PROGRAMME—HEALTH CENTRES

At the close of the year 10 health centres were operational and a further 8 were being actually planned. Programme years have been allotted to a further 17 projects.

During the year under review it became necessary to review the health centre programme in the light af local government and national health service rearganisation. In line with county council policy no health centre was deleted from the programme because it happened ta fall within the Wirral or the area to become greater Manchester. However, as a result af the review the priorities of certain projects have been altered for other reasons.

The year saw the opening af the first fully purpose-built health centre at Castlefields in Runcorn New Town. (The Queen and the Duke of Edinburgh were to visit the centre in the spring of 1972.) The permanent building, opened in October, was preceded by a temporary building which opened in March 1969. During the 2½ years the practice list increased from 5,376 to 11,317 patients. The provision of a temporary building proved entirely justified; patients, family doctors, and attached local authority staff had formed a team before going into the permanent building. Though it cannot be maintained that the first months in the new building were without problems, the 2½ years in the temporary health centre did much ta make the settling-in as easy as possible.

The other health centres opened during the year were either additions ta existing clinics, or (in the case of Bebington) a late adaptatian af a purpose-built divisional affice and clinic for general practice purposes. The Bebington Health Centre, which was visited by the Duchess of Kent in July 1971 at the time af its opening, is proving mast successful in operation.

The three clinic adaptations in Sale (Bodmin Road, Canway Raad and Meadway), and the Heald Green Health Centre, Cheadle, well illustrate the problems af adding a building an ta existing clinic premises. The disruptian of existing services and delay in the projects, due to the buildings being in use, have cast seriaus doubt an whether this is a satisfactory way ta provide a health centre. The great merits are, firstly that land already in the ownership of the local health autharity can be used, and secandly that family doctors and local health authority clinics are identified together by the public.

The great majority af future health centres will be discrete buildings often on a common plot with other community services such as a library. That on the Crewe central site will be in the office area af the town but adjacent to the central bus station and a few minutes' walk from the shopping centre. In West Kirby the health centre will be part of a complex including a library, social services day centre, sports facilities for the young, and a fire station. Only

time will tell if such developments are liked by the public and the staff who work in them. At this stoge af heolth centre evolution it wauld seem right ta pursue a policy of diversity within certain well-tried principles.

During the year a booklet on the planning af health centres was praduced, in conjunction with the nationol health service executive council for Cheshire, and issued to all family dactors and other professions involved in the setting-up of health centres. This baoklet was well received both locally and nationally.

Projects completed 1971:

Health Centres	—	Bebington (with divisional office).
	—	Cheadle Hulme (extension).
	—	Great Sutton (extension).
	—	Heald Green (extensian).
	—	Runcorn, Castlefields.
	—	Sale, Conway Raad (extensian).

Current Projects:

Heolth Centres	—	Bramhall.
	—	Sale, Bodmin Road (extension).
	—	Sale, Meodway (extension).
	—	Nantwich.
	—	Winsford, High Street.
	—	Holmes Chapel.
	—	Romiley.
	—	Tarporley.
Ambulance Stations	—	Cangleton (8-bay).
	—	Sandbach (8-bay).
	—	Winsfard (6-boy).
	—	Sale (6-boy).

TIME OF TRANSITION

TIME OF TRANSITION

THE SOCIAL SERVICES

In 1971 the Local Authority Social Services Act 1970 came into force; its object was to bring together all the forms of social help hitherto provided by other committees. From 1st April 1971 the functions of the former children's and welfare committees were transferred to the new social services committee, which also took over from the health committee those functions which had been judged by the Department of Health and Social Services to be primarily social in content. These included help in the home, the county day nurseries, the registration and supervision of private child minders, the social care of the disabled, and the welfare of unmarried mothers. Most extensive was the care of the mentally disordered and sub-normal, by way of supervision, social meetings, help in admission to hospital, after-care, hostel facilities for all ages and training centres for adults; the training centres for children were transferred as special schools to the education committee at the same time. The health committee had had responsibilities for an increasing proportion of mental health matters for over 50 years, and the experience of the staff concerned ensured that transfer was effected as smoothly as possible. Dr. Robert Blyth remained with the Health Department as principal medical officer for the medical aspects of mental health, as dealt with in a later chapter.

It was clearly essential for co-operation to be effected with the Social Services Department at all levels, and the Director, Mr. M. Speed, had made a point of meeting key staff being transferred. There are regular meetings at chief or deputy level, and the secondment, primarily for mental health, of Dr. Blyth, who has an office in both departments, has forged links over a much wider field not otherwise easy to achieve. It has thus been possible to ensure that each department understands the role of the other in detail as well as in principle. A two-way flow of information has been ensured at meetings of divisional medical officers, and a medical viewpoint when matters which can be assisted thereby arise in the Social Services Department.

THE HEALTH SERVICE

The year 1974 will see the end of that responsibility for personal health services which was laid upon the County Council by a long series of measures mainly between 1901 (first Midwives Act) and 1968. The Central Authority has decided that a wholly new and separate Authority shall be set up to control and administer those services in conjunction with those for domiciliary medical services and for hospital services. For such a radical change, the timetable is short, as the intention is that the new Health Authority shall take over on 1st April 1974. The county health department is therefore already doing what it can by forward planning to promote smooth transition at all levels. Training programmes for all categories of staff now include particulars of the new Authorities and their functions.

In anticipation of the re-organisation, the County Medical Officer and his Deputy, Dr. W. A. Pollitt, each spent one month on attachment to the Manchester Regional Hospital Board. This invitation from Dr. Lane, Senior Administrative Medical Officer to the Regional Hospital Board, was offered to Medical Officers of Health of Local Authorities in order that the scope of the work carried out by the Board might be appreciated in anticipation of the Medical Officers' involvement in 1974. Reciprocal facilities for Medical Officers of the Board to be seconded to Local Authorities of their choice have also been arranged. The month spent was most beneficial in acquainting the Medical Officers with the problems of providing hospital services, both by up-dating old buildings and facilities, and by planning new hospitals and services based on the concept of the multi-purpose District General Hospital. This concept pre-supposes strongly developed Health Centres with appropriate services providing domiciliary support. These Health Centres may well be called upon to play a new part in providing casualty services for local communities.

In preparation for the unification of Health Services, plans were being made at the end of the year for a series of quarterly Health Centre strategic planning meetings to be attended by senior representatives of the Local Health Authority, the Executive Council and the Regional

Hospital Baards of Liverpool and Manchester. In oddition it was being suggested that on the project teoms far eoch Health Centre members of Regianal Haspital Boards might be present as apprapriote, in oddition to the family doctors wha would work from the Heolth Centre. Health Centres have an expected life upwards of 60 years; it is plainly essential thot any planning must take inta account the needs af the future, in particular that of o unified Heolth Service.

Another interesting development during the year was the appaintment of a general proctitioner by Liverpool University to be the seniar physician at the temporory Health Centre at Palacefields, Runcorn. When the permanent Health Centre is opened it will have teaching facilities, including a librory and common-room for students.

Training forms a link between hospitals, family dactars and ourselves. Increosingly our awn staff hove been on multi-disciplinary courses ar day meetings where the problems of the future are discussed. Both medical and nursing stoff lecture inside ond outside the County to members af other disciplines or other sections of the Health Service.

It is also significant that the District General Hospitol concept has no langer such exclusive prominence in hospital planning as it did when the District Haspital idea was first braached in 1962. Though several small hospitals have been closed, others hove been spared, and it seems likely that they will in many parts of the country still have a role to play. As has been pointed out by their Association, they can provide what is advantageous ta the patient, the practitianer, the specialist, the local community and the cauntry as a whole. The patient can have treotment near his home ond relotives, appropriate to his condition, which does not always call for a bed at a large hospital providing every possible facility. The general practitioner con have immediately available facilities for him to supplement his clinical skills, and the specialist can reserve his skills ond equipment for the treatment of those who really need them, either ot the large hospital or in a consultative capacity at the small hospital when needed. The local cammunity benefits by being able to care for its awn sick withaut having to uproot them, and the nation benefits by having the skills of doctors, nurses and other trained staff spread widely instead of being concentroted in large centres of population.

Fallawing upon the Salmon report on nurse administration in hospitols, the Mayston repart detoiled a parallel organisatian for control of damiciliary nursing, and Cheshire, which had alreody initiated changes on Mayston lines, has been selected as a "model" areo for special abservotion by the Department of Health.

During the year members af the Asa Briggs Committee an the future of nursing visited Cheshire. They met with all levels af nursing staff and discussed with the County Medical Officer ond his Deputy the future of nursing services in Cheshire.

Still looking tawards the future, it is a saurce af same pride to state that early in 1972 all feasible ottochments af health visitors, district nurses and midwives had been campleted. At the end af December 1971 over a millian af the papulation in Cheshire were served by 452 general practitioners in 198 practices, all af which had ottoched nursing staff. It is in these practical ways that preparation for the future can be made in the present. The nurses too have been active in haspital liaison in the past year, particulorly in the fields af midwifery ond exchange nursing posts. Further detoils will be faund in the nursing section.

The Godber Repart ("Cagwheel") had stressed as long ago as 1967 that there should be mare practical links between haspital doctors, general practitioners and medical afficers of health, and in Cheshire negatiatians with this in view have been pursued as soon as practicable with each General District Haspital. Dr. H. Jennings, Divisional Medical Officer, Wirral, is a member of the Clatterbridge Medical Executive Cammittee, and the West Cheshire Hospital (Chester) has instituted discussion on assaciatian between practitianers af cammunity and of haspital medicine. The new hospital at Leightan (Crewe) hos also initiated discussion on these lines.

Links with our general practitioner colleagues have been as strong as ever during the past year. Members ond the County Medical Officer serve on the Locol Executive Council. The

County Medical Officer sits on the Local Medical Committee and meets regularly with the Secretary of the Local Medical Committees. Plans are being discussed for Local District Medical Committees to be co-terminous with the Hospital Districts which are now envisaged. Plans are not yet completed, and they await further particulars of hospital catchment areas. In the meantime the District General Hospitals, existing and projected, appear to be well situated to serve the new Cheshire.

FAMILY HEALTH

FAMILY HEALTH

COMPUTER-MANAGED CERVICAL CYTOLOGY

The computer-managed cervical cytology scheme was considerably expanded during 1972. The scheme was extended to Nontwich, and by the end of the year the first enquiry letters had been sent out in both Alsoger and Sandbach.

The total number of women who had joined the scheme by the end of the year was over 6,000, representing well over half of the women eligible by age who had been opproached. Some 5,000 first smears had been taken, and some 3,500 repeat smears after two months.

The scheme continued to attract those people at high risk of contracting cancer of the cervix uteri, as was reflected by the positive smear rate of 5.5 per 1,000, which is approximately 50% higher thon thot normally expected. The scheme continues to be favourobly received by the general practitioners in the areas covered, mony of whom now run their own sessions as part of the computer scheme. It is expected that the scheme will continue to expand further in the future.

GERIATRIC STUDY DAY

A geriatric study was held in Macclesfield in April, and was open to all those responsible in any way for the provision of services for the elderly. Some hundred persons attended, representing a wide range of disciplines within the medical and social work fields, but also including representatives of other services such as local outhority housing. The first paper was presented by Professor J. C. Brocklehurst, the then newly appointed Professor of Geriatrics at Monchester University. Other contributors included the Director of Social Services, a consultant geriatrician, and a consultant psychiatrist.

The study day provided an opportunity for persons normally dealing with isolated aspects of the care of the elderly to come together to pool their ideas and discuss the availability, resources and the scope for co-operotion. The progromme provided an opportunity to consider the next steps in the further development of geriatric services.

As part of the development of Geriatric Services by the Local Health Authority a considerable study has been undertaken by a working party consisting of consultants, county officers and general proctitioners, together with the nursing services, and the final outcome of a very long period of investigation and study stretching over some three years was that a pilot scheme in geriatric screening was begun in three practices in north-east Cheshire Division and one practice in south-east Cheshire at Poynton. Comprehensive registers of all people over the age of sixty-five were obtained by courtesy of the Local Executive Council in connection with the practices involved and to begin with, all people over the age of seventy-five were visited by health visitors and special questionnaires were completed. Appointments are made weekly for people not seen by their family doctors for at least twelve months and a comprehensive medical, nursing and social investigation is carried out. It is estimated that this pilot scheme will have to go on for at least two years before the results can be properly evaluated and the benefits assessed.

FAMILY PLANNING

The County Council has for yeors sought to provide a free and effective Family Planning Service for those in medical need. More recently the free service has been extended to those who can demonstrate social need on grounds of low income. During the year under review the limit of income for those entitled to free family planning has been substantiolly raised. Despite this policy it would appear that only a small proportion of Cheshire women ore being reached through the Council's Family Planning Service run on their behalf by the Fomily Plonning Association. During the yeor about 16,000 women were seen in family planning clinics in Cheshire, representing only 9.4% of the married women ot risk of pregnoncy. A grant under the urban progromme was sought from the Home Office for a domiciliary service in Hattersley, Partington, Winsford, Ellesmere Port and Crewe. Immediately this was granted, arrangements were made for the speciol troining of four county medical staff.

When considering the needs of the future the County Heolth Committee considered the options of o "free for oll service" or one directed only ot those members of o community who could not or would not control their own fertility. It was felt thot on o cost-effectiveness basis the primary task was to provide on efficient domiciliary Farmily Planning Service throughout the county. Provision was therefore made in estimates for such a service starting in the financiol yeor 1972-73.

At the close of the yeor plans were being drawn up for an intensive family planning research project to be run in Runcorn by the Fomily Planning Association on behalf of the Deportment of Heolth and Social Security. £25,000 is to be provided from central funds "to provide more than enough of everything" in the woy of free controceptives and advice to a restricted populotion group of 36,000. The evidence of this will be monitored by PEP (Politicol and Economic Planning) who will record attitudes of the public ond professions before ond after the project, and relevant statistics reloting to births, obortions ond mole and female sterilisations. They will of course olso meosure the uptake of contraceptives in the study area. In this woy it is hoped that the ideo of the cost of o free controceptive service will be goined. It will be less easy to meosure its effectiveness. Only in this way can management decide between the opposing claims of those who odvocate a free for all service and those who would rather deploy scarce resources in the most needed oreo.

COMMUNITY NURSING SERVICES

COMMUNITY NURSING SERVICES

A comprehensive report an the community nursing services in Cheshire was approved by the county health committee in January 1971. As a result the nurse management structure was re-organised in accardance with the recommendatians af the Mayston Repart. This invalved increasing the number af areas fram 5 ta 8 and the intraduction af a tier af first-line managers which included the existing ten graup advisers. The management pasts are naw as follows:

Top management:	Chief Nursing Officer	
	Principol Nursing Officers	(2)
Middle management:	Area Nursing Officers	(8)
First-line management:	Senior Health Visitors	(12)
	Senior District Nurses	(12)
	Seniar Midwives	(8)

Our praposals were subsequently accepted by the Department af Health and Social Security and Cheshire was designoted as ane af 12 madel areas. In addition, approval was given to increases in the establishment af the field staff and the intraductian af nursing auxiliaries and lay assistants. All these oppointments were ta be phased over three years.

ATTACHMENT OF NURSING STAFF TO GENERAL PRACTITIONERS

Arrangements with generol proctitioners far the attachment af nursing staff ta their practices continued throughout the year. During 1971 schemes were inaugurated in the following areas:

Lymm, Stackton Heath & Grappenhall, Altrincham, Timperley ond Hale, Congletan and Halmes Chapel, Heswall and Nestan, Hazel Grave and District, Sandbach and S.E. Cheshire.

Nurses were also attached ta Chester City dactors to care for their patients living within the county.

The following table illustrates the progress of the scheme up to 31st December 1971:

		ATTACHMENT OF NURSING STAFF		
	POPULATION	PRACTICES	DOCTORS	NURSING STAFF
1969	252,000	32	101	102
1970	459,300	72	189	206
1971	300,400	94	162	131
TOTAL	1,011,700	198	452	439

This left ane area with attachment planned far January 1972 and one ather area where nurses and midwives would be attached in March 1972. Unfartunately two group practices and two single-handed doctors have refused the scheme; atherwise attachment will then be complete.

Naw that individual attachment schemes are gaining in mamentum remarkable increases in the work achieved by nursing staff have been recarded during 1971 as may be seen in the following table:

	1970	1971	INCREASE	% INCREASE
Health Visitors				
Visits to all persans over 5 years af age	37,571	51,547	13,976	37%
District Nurses				
Home visits	497,724	544,164	46,440	9%
Treotments in centre	33,137	67,647	34,510	104%
Ante-Natal Clinics	5,770	7,681	1,911	33%

Negotiations are at an advanced stage with Derbyshire in order that nurses may cross the county boundary to care for patients of the practices to which they are attached. Particular problems present themselves around Chester City, and some discussions have been held in an attempt to resolve these.

TRAINING

In the continued absence of a district nurse tutor two district nurses went to Manchester and two to Liverpool for theoretical training ond were oll successful in their examinations. One of the area nursing officers with a small area has added the role of district nurse training officer to her management duties, ond courses will re-commence in Cheshire eorly in 1972.

In the field of midwifery troining the Centrol Midwives Board issued o new syllobus which included a greater emphosis on the broader aspects of community core. As a result of this the second part of midwives' training was completely revised, and pupil midwives from four hospitals now meet together ot the nurse troining unit, Northwich, for their study days. During 1971, 12 pupils undertook training in accordance with the old syllabus ond 21 pupils undertook the new community care programme.

All the 17 health visitor students who completed their troining in the autumn of 1971 are now in the employ of the County Council. 15 health visitor students sponsored by the County Council for the 1971-72 course are undertaking training at various centres.

Plans are well advanced for hospital student nurses to spend six weeks in the community getting an overall view of the community health services in accordonce with the General Nursing Council's syllabus issued in 1969. One of the areo nursing officers has a special responsibility to co-ordinote this arrangement with all the hospitols taking part in the scheme.

DEVELOPMENTAL PAEDIATRIC SCREENING

Elsewhere in this report there is a full description of the revised scheme of developmentol paediatric examination. This now involves the health visitor in alternoting with the doctor in carrying out these examinations. All the heolth visitors hove undertaken a course of training to enable them to take port in the scheme.

MATERNITY SERVICES

The first scheme in Cheshire whereby domiciliary midwives undertake delivery of their patients in hospital came into operotion on the general practitioner word of the new maternity wing of the West Cheshire Hospitol in October 1971. Discussions are far advanced for the implementation of similar schemes ot the new maternity units of Stepping Hill Hospitol, Southfields Hospital (o general practitioner hospital within the Wythenshowe and North Cheshire Hospital Group), and the obstetric unit of the West Pork bronch of Macclesfield Hospital.

LIAISON WITH HOSPITALS

Looking ahead to the integration of the health services in 1974, considerable progress has been made in Cheshire during 1971 towards a closer co-operation between the nursing services in the community and those in the hospital. Not only have nursing officers throughout the county been invited to lecture to student nurses, ward sisters and nurse tutors, but also several meetings between field staffs have been arranged and were highly successful in terms of the increased liaison which ensued. In one orea this resulted in an exchonge of visits during which community nursing staff spent a week in hospitol observing the hospitol services, and hospital sisters spent one week in the community. There are plans to extend this scheme to other hospitals.

THE COMMITTEE ON NURSING

This committee was set up under the choirmanship of Prafessor Asa Briggs ra review the rales af nurses and midwives; the educatian and troining required in arder to fulfil thase roles is of vital impartance to the nursing professian at this time.

Members af the committee visited Cheshire in November 1971 and held discussions with a cross-section af nursing, medicol and odministrative staff.

REGISTRATION OF HOMES

Respansibility for the registration of privote old people's homes and private disabled persons' homes under the Nationol Assistonce Act 1948 wos tronsferred to the Sacial Services Committee on 1st April 1971. The registration af private nursing homes under the Public Health Act 1936 remains the responsibility of the County Health Cammittee. At the end af 1971 the position was os follows:

New homes opened during 1971	4
Homes closed during 1971	—
Number of homes registered at 31.12.71 ...	19
Totol number of beds available at 31.12.71 ...	340

One of the registered nursing homes included abave is also registered under the Abortions Act 1967 and during 1971 performed 150 obortions. This campares with 85 in 1970 and 41 in 1969.

In oddition to the 19 homes shown in the toble above a 400-bedded psychiatric hospitol is registered as a mentol nursing hame in accordonce with the provisians of the Mental Heolth Act 1959.

MENTAL HEALTH

TRANSPORTABLE HOME DIALYSIS UNIT—INTERIOR

MENTAL HEALTH

With the advent of the new social service department due on 1st April 1971 and the consequent termination of the mental health section of the health department, it was inevitable that the first three months of 1971 would not see any new developments in the mental health field, rather would the services as previously developed be continued and prepared far the hand-over to the new social service department.

Mention was made in last year's report af the completion of Heswall adult training centre, and in January 1971 this centre opened for the receptian of trainees, bringing the total county provisian af adult training centres up to seven. Heswall adult training centre in its structure incorparates the mast modern ideas for helping the adult mentally handicapped. The work areas are large, and can be quickly adapted to the various work procedures which form part af the curriculum of a modern centre. The trainees from the Deeside area of the Wirral were transferred from the rather overcrowded Ellesmere Port training centre ta Heswall.

The centre was fortunate in obtaining the services of Mr. Vickerman as manager. Mr. Vickerman, wha is qualified in the wark of training the adult mentally handicapped, had previously held the post of senior instructor at the Ralph Smith adult training centre, Hull. He quickly acquired light assembly contract work from nearby factories in accordance with county palicy and set about organising a social training programme, a vital preliminary factar to placing groups of trainees with their instructor in nearby factories. Mr. Vickerman's training and wide experience were shown by the enthusiastic manner in which he accepted and laaked forward ta implementing with his centre the caunty palicy of groups of mentally handicapped trainees in factaries with their awn instructar. This scheme (described in detail in previous reports) continues to aperate with great success, and an expansian of the scheme on a natianal basis can be foreseen.

Junior training centre facilities far mentally handicapped children between the ages of twa and sixteen years are provided at Eastham, Neston, Crewe, Northwich, Altrincham and Macclesfield. Hyde juniar training centre caters for mentally handicapped children fram five to sixteen years, because the centre at Glengarth, Marple, has for same years pravided an excellent service far the two to five year alds in this area af Cheshire. Glengarth is run by the North East Cheshire Saciety for Mentally Handicapped Children, and the centre is used by the county an an agency basis.

Just as April 1971 was a mast significant date for social warkers, so alsa was it an important date in the junior training centre field, because on 1st April 1971 junior training centres passed fram being the responsibility af health cammittees and departments to that of education cammittees and departments, and they were renamed day special schools. The Education (Handicapped Children) Act 1970 was the legislatian under which this transfer took place.

Far many years juniar training centres under health committees and departments gave a service to mentally handicapped children which has progressed fram the early beginnings af occupation centres in rented church halls ta the present day, when purpose-built centres with scientifically structured curricula and trained qualified staff are standard requirements; pragress has been rapid and the standard is good. However, there has always been one problem keenly felt by parents of mentally handicapped children throughout the caintry; they suffered from the knowledge that their mentally handicapped child had been excluded fram the "educational" system and had been made the responsibility of a health department due to severe retarded intellectual development. The fact that the junior training centre was in fact a school, although under a health department, and provided education, though it was called training, did nothing to lessen their concern. Under the recent legislation every child in the country is entitled to education in accardance with his need and patential from an educatian committee and department.

The junior training centres are self-contained units with a specialised function, and in April 1971 little change, if any, would be apparent in a centre, even though the department under which it operated was changed. However, the new administrative services for the centres had

not had the experience of being responsible for this category of pupil, and it was necessary during the first three months of 1971 to have many meetings between the health and education departments so that information and knowledge could be made available to the education department; for the same reason, joint visits were made to all centres.

Day special schools are now an integral part of the educational services, and this must influence the schools in the times ahead to the advantage of their severely mentally handicapped pupils. The health department will continue its important medical role, as it does for all school children throughout the school health service.

During the first quarter of 1971 no new hostels for the mentally handicapped came into operation. The requirements of the county continued to be met by the hostels for mentally handicapped children at Neston and Crewe and hostels for the adult mentally handicapped at Wrenbury, Macclesfield and Stalybridge. Work continued on the three new hostels under construction at Ellesmere Port, Sale and Northwich which would receive residents later in the year.

The demand for vacancies in hostels for mentally handicapped adults and mentally handicapped children exceeds the availability of places, although the ever-increasing local authority provision is significantly reducing the gap between supply and demand. The well-established county scheme of rotating short-term care has gone a long way towards providing relief for parents in need, and a consequent reduction in the number of requests for permanent care of the mentally handicapped. Under this scheme the mentally handicapped adult or child spends alternate periods of two weeks in hostel and eight weeks at home. The success of the scheme is now well established, and no doubt it will be expanded under the auspices of the social service department.

Mention was made last year of the successful implementation of the "council house scheme". Under this scheme patients in psychiatric hospitals who are sufficiently recovered to be discharged but have no suitable accommodation to which they can go, are admitted to a council house, furnished by the local health authority and rented by that authority from the housing authority. The council house can take four or five patients who pay £2.50 each to the county council to cover rent, rates and electricity; the remainder of their money covers food and their own personal needs. The patients work in the hospital industrial therapy unit. Last year a house in Poynton near Macclesfield took the first patients from Parkside Hospital; this year a council house in Upton-by-Chester took the first patients from West Cheshire Hospital and is proving as successful as the initial venture at Poynton. These two houses represent the start of a long-term plan whereby 22 council houses will eventually be in operation near both Parkside Hospital and West Cheshire Hospital, 11 houses in each area. It was fortunate that the health department had been able to demonstrate the value of this scheme before handing over to the social service department the responsibility for providing facilities for patients suitable for discharge and re-housing from psychiatric hospitals for the mentally ill.

It has long been accepted that the ability of a mental welfare officer to provide supportive therapy to patients in the community will depend on three factors: the resources upon which he can call, his personal make-up as an individual, and the training he has received. The training programme for mental welfare officers which this authority has operated for some years must be one of the most ambitious in the country, and during the first quarter of 1971 there were 12 officers away on courses which would lead to the qualification of certificate in social work.

The new social service department will clearly require the fullest possible resources in terms of material, knowledge and experience of staff. As it is to undertake responsibility for the services for the mentally disordered, it must evidently have prompt access to technical knowledge in this field, and it was therefore decided that from April 1971 Dr. R. Blyth should be seconded from the health department to the social service department, so that his knowledge and experience in the field of mental disorder would be readily available to the director of social services and to his staff.

TRANSPORTABLE HOME DIALYSIS UNIT—EXTERIOR (LEFT)

PHYSICALLY HANDICAPPED

PHYSICALLY HANDICAPPED

The responsibility for the provision of services for the physically handicapped in Cheshire (including the blind, the partially sighted and the deaf) was transferred from the county health committee to the newly formed social services committee on 1st April 1971. At the time of transfer club facilities for the physically handicapped were available in all health divisions, one purpose-built handicapped persons unit was in operation in Northwich, a second at Bebington was in the process of being equipped, and at Crewe a third unit was nearing completion.

Upon the recommendation of the Department of Health and Social Security, responsibility for the adaptation of properties to enable regional hospital boards to install artificial kidney machines in the homes of persons suffering from renal failure, remain with local health authorities and during 1971, nine requests for adaptations for artificial kidney units were received in respect of Cheshire residents and have been—or are being—complied with. An interesting feature in this field has been the development commercially of transportable, pre-fabricated home dialysis units to go with the artificial kidney units. They are supplied complete with sink, cupboards, shelving, etc., wired and fitted electrically, together with built-in plumbing and drainage. Two of these units, included in the nine adaptations approved during 1971, were provided at properties which did not lend themselves to adaptation. The photographs show one of them, and the following letter from the parents of the patient concerned illustrates the value of the installation:

> "On behalf of my husband, Christine and myself I would like to say a very sincere thank you for the home dialysis unit which you have had installed for us. We are really overwhelmed with the kindness and generosity we have received.
>
> It has all been done so quickly and everyone who has worked on it has been most conscientious and helpful.
>
> Please pass on our very grateful thanks to all who have been concerned with the project. We certainly consider ourselves very lucky and deeply indebted to you. We are once more a family unit after eighteen months of separation."

ENVIRONMENTAL HEALTH

ENVIRONMENTAL HEALTH

COMMENT

1971 was another very active year in the public health sectian of the department. The main facets of the work are reported in the following pages and in the environmental health section of the school health report.

Routine work in the control of brucellosis continued, and perhaps the outstanding point which emerged here was the marked reduction in the number of our "raw milk" herds found to be infected with brucella during the year—only 16 of the 185 herds, against 42 in 1970. The graph given in the report shows quite clearly the peak that was reached in 1969 as a result of restocking herds after the foot and mouth disease epidemic, followed by a dramatic reduction, with the 1971 figure the lowest since our work became established on a comprehensive basis. First steps towards compulsary eradication were taken in 1971, but Cheshire is likely to be one of the last areas to be dealt with. Accreditation is making camparatively slow progress in Cheshire, though 68 of the 185 producer-retailer herds are now fully accredited. Faurteen new human cases of brucellosis were reported in 1971, and it is perhaps significant that these are naw almost entirely amongst farmers, their families, or the farm workers.

Work in connection with schemes under the Rural Water Supplies and Sewerage Acts seems to be increasing at the present time, mainly because some of the rural district autharities are making efforts to get essential sewerage schemes appraved and in hand before April 1974, including some rationalisation of their disposal facilities into wider areas. Fluoridation is at last making some progress in the county with the county cauncil's decision in favour, and the first steps were taken in 1971 towards the fluaridatian af certain supplies in the county.

There was considerable activity during the year in the field af faad hygiene, where the public health section liaises closely with the caunty catering organiser. A number of codes af practice have been, ar are being, evolved, and the section is co-operating with the school meals service in a pilot scheme for applying pre-cooked frozen food techniques to the service.

A cade of practice for public health safeguards in school swimming pools was alsa formulated at the end of 1971, and distributed to all schools having their own pools.

Finally, the year saw great activity in the shape of warking parties or cammittees set up ta deal with various environmental problems. The county public health officer has served on a working party studying pollution problems in the Warringtan area, a cammittee set up to study the results of monitoring the environment around the new fibreglass factory, near Wrexham, a cammittee formed to deal with the pollution of the River Mersey, and a working party set up to establish sites in the caunty far gipsies. He is also keeping in touch with the work of a small working party examining the problems of the disposal of industrial wastes in the Upper Mersey valley.

MILK AND DAIRIES

The work of ensuring that all milk produced, processed and sald within the county reaches the consumer in a clean and wholesome condition and free from disease-producing organisms was continued during 1971. All milk samples collected in cannection with this work, as well as washed bottles for rinse examination, are examined by the public health laboratory service of the Department of Health and Social Security, which pravides the caunty council with a free service for these purposes. We are greatly indebted to the laboratary services for their co-aperation.

Sampling frequencies and pracedures are agreed with the directors of the two public health laboratories.

(a) **Milk Production**

Production is controlled by the Ministry of Agriculture, Fisheries and Faod, but producers bottling milk not of their own production are licensed by the county council (see "distribution"), and a specific duty is also laid upon county councils by section 31

of the Food and Drugs Act 1955 to administer provisions designed to prevent the sale of diseased milk. The two principal diseases which milk may canvey are tuberculosis and brucellosis.

This wark is particularly impartant in view of the fact that there are 185 herds in the county from which milk is sold raw to the public. It is estimated that appraximately 6,000 gallons of milk are sold each day under the designation "untreated (raw)" in the administrative county. This means that 68,500 persons are continually at risk in Cheshire from drinking raw milk.

(i) **Tuberculosis.** During 1971, 600 samples were submitted far biological examination from 185 'raw milk herds'. In na case was tuberculosis infection detected.
Samples are submitted from each herd annually with the exception af smaller raw milk supplies (up ta ten gallons per day) which are examined once in two years.

(ii) **Brucellosis.** The department's extensive work in co-operation with the district council health departments cantinued in accordance with Ministry of Health Circular 17/66. The sampling frequencies and procedures evolved in 1967 have praved highly satisfactory and were not changed.

The milk ring test is used as a screening test for all samples and a cultural examination is carried out on all milk ring test positive samples. If a sample is strongly positive on the milk ring test, ar an examination for tuberculosis is required, a biological examination is also carried out.

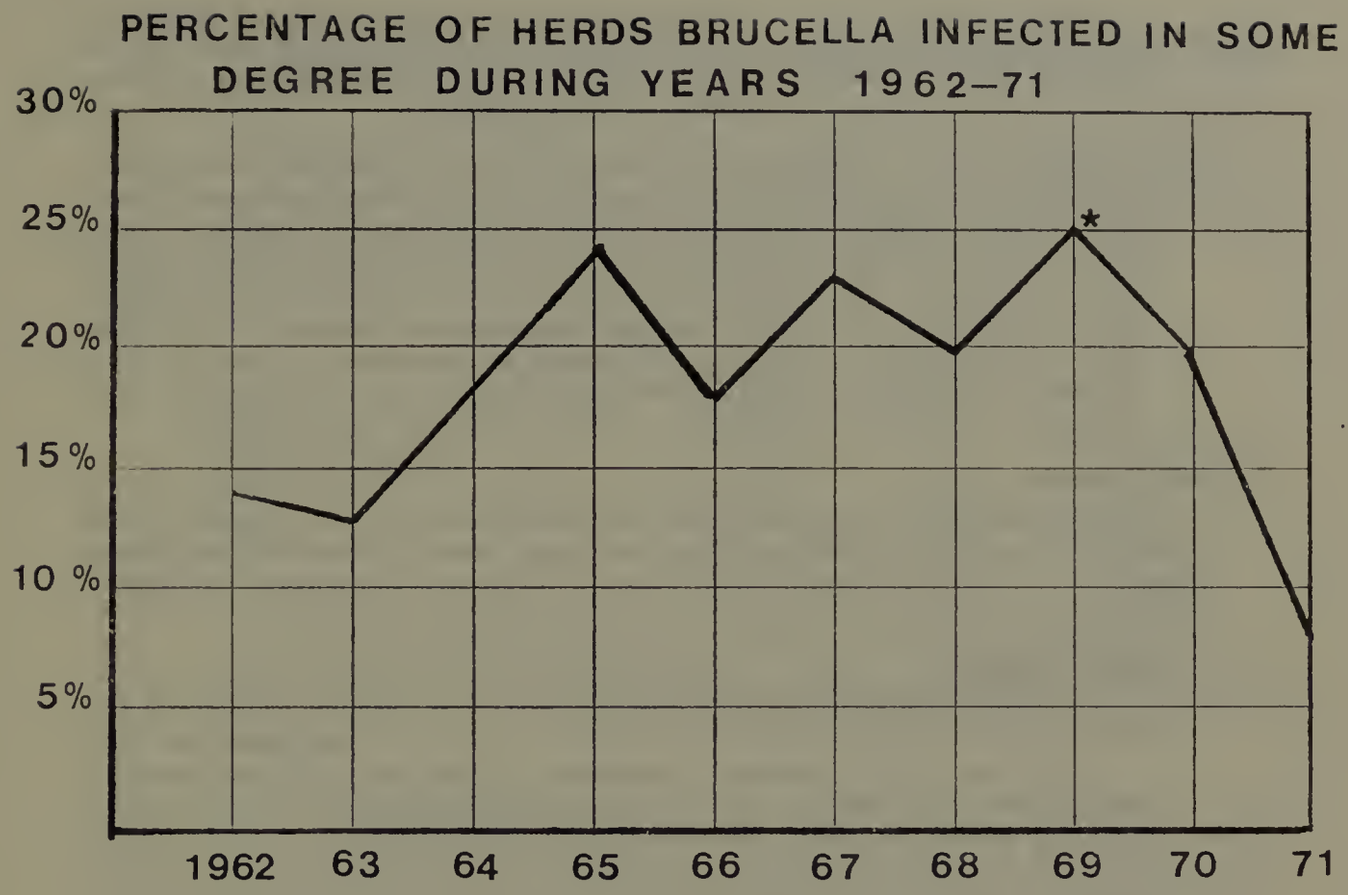
The following table sets out details af the number of samples submitted for brucella examination and the results obtained.

	TOTAL SUBMITTED	CULTURAL EXAMINATION		BIOLOGICAL	
		Total	Brucella Positive	Total	Brucella Positive
Schools	17	2	—	17	—
Dealers	2282	76	10	89	4
Farms (Bulk)	786	37	5	418	—
Individual Cow Samples	1111	143	36	76	—
	4196	258	51	600	4

During the course of the year 16 different herds were found ta be brucella infected in same degree. This is a considerable improvement on 1970 when 42 herds were infected.

The brucella figures generally are a great impravement an the previous year. A number of factors have no doubt contributed ta this very much impraved situatian, viz. the strict milk sampling control exercised by the county council in co-operation with the district councils; the effart made by the veterinary afficers of the Ministry of Agriculture, Fisheries and Foad in encouraging producer-retailers to participate voluntarily in the Brucellosis (Accredited Herds) Scheme; the desire af praducer-retailers to have a "clean" herd and the fact that brucella-free cattle are now available when replacement animals are required.

The following graph illustrates the improvement in the degree af brucella infection for the period 1962-71. The sample reports for 1972 at the time af writing this report indicate that the situation is further improving.



* Restocking after foot and mouth epidemic

In the spring of 1971 the Minister of Agriculture, Fisheries and Food onnounced the commencement of compulsory eradication areas. Initially three areas in England and Wales were invalved, narth-west and south-west Woles and the Isle af Wight, also part af western Scotland. These areas were chosen because of their respanse ta the voluntary schemes, the small amount af infection present, the flow of cattle to and from the areas, the natural boundories, and the patential for extensian inta ather areos. Unfartunotely Cheshire did not meet these requirements ond na part of the county is at present included.

The first eradication measures were due to commence on 1st Navember 1971 but awing ta the difficulty inherent in starting compulsary eradication at short natice, eradicatian will be an a voluntary basis anly for the first year and campulsory eradicotion will begin in Navember 1972.

At the time of writing this repart (March 1972) the situatian in Cheshire with regard to the voluntary Ministry brucella scheme wos that af the approximote 3,250 registered milk praducers, 365 were fully accredited. Included in these figures ore the 185 producer-retailers of which 68 were fully accredited and a further 26 in the various stoges of acceptonce. These figures may be compored with those for last year when o totol of 224 producers was fully occredited of which 42 were producer-retailers.

The human case register maintained in the department since May 1961 now stonds at 208, 14 being reported during 1971.

Most of the recent cases, however, have been in farmers or their families, and not connected with the supply of raw milk to the public, which could mean that the measures being taken by the county and district authorities in Cheshire to protect the public from contracting brucellosis are being effective.

(iii) **Antibiotics in Milk.** Antibiotics are widely used for the treatment of mastitis in cattle, and it is most undesirable that traces of antibiotics should be present in milk. Sampling for the detection of antibiotics in milk has therefore been continued during 1971. As the pasteurising dairies are carrying out periodic checks on their incoming farm milk supplies, the department has concentrated its attention on producer-retailer milks and other 'raw milk' supplies, using samples obtained for brucella and other examinations. A total of 1,798 samples was examined, of which six were reported as containing antibiotics. Appropriate action was taken in these cases including re-sampling. In no instance was the repeat sample unsatisfactory.

(b) **Milk Licensing**

With the exception of producers and producer-retailers who are licensed by the Ministry of Agriculture, Fisheries and Food, the county council is responsible for all milk licensing in its "food and drugs" area. Because of increased population Macclesfield Borough Council took over this duty within the borough on 1st April 1971.

(1) **Milk Processing**

The county council is responsible for the important functions of licensing and supervising all milk pasteurising and sterilising plants in its "food and drugs" area.

At the end of 1971 fourteen pasteurising establishments and one sterilising establishment were licensed. Both processes ensure destruction of all pathogenic organisms without any significant effect on the nutritive quality of the milk, and at the same time give enhanced keeping qualities. During the year a holder-type pasteurising plant was installed and came into operation at the farm premises of a producer-retailer and one pasteurising dairy of medium size closed as processing was transferred to a larger unit.

Pasteurising plant is also being installed at a further producer-retailer's premises and should come into operation during 1972.

A major extension and re-equipment scheme was completed during 1971 at one of our largest dairies which is now pasteurising approximately 40,000 gallons of milk per day or the daily milk consumption of 450,000 people.

A total of 2,794 pasteurised and 49 sterilised milk samples was obtained from the processing dairies, and with the exception of one phosphatase test failiure (this is the official test for the correct heat-treatment of pasteurised milk) and 22 methylene blue test failures (for cleanliness and keeping quality of pasteurised milk) all the samples proved to be satisfactory. Almost two-thirds of the methylene blue test failures were from three small dairies where milk cooling and other problems (since resolved) had occurred. The remaining failures were fairly uniformly distributed amongst the other processors.

Washed bottles are collected from each bottle-washing machine at the processing dairies at regular intervals so as to check the efficiency of the bottle-washing procedures. A total of 1,008 bottles was examined during 1971, 870 of which were satisfactory, 99 fairly satisfactory and 39 unsatisfactory. These results are an improvement on the previous year. The unsatisfactory results were resolved after appropriate action.

(2) **Milk Distribution**

The county council is responsible for the licensing of all milk distributors by the issue of dealer's pre-packed milk licences, and of all establishments where untreated milk is bottled, other than the farms where the milk is produced, by the issue of dealer's (untreated) licences.

During the course of 1971, 109 dealers' pre-packed milk licences were issued and 122 were cancelled. At the end of the year, 1,108 pre-packed milk licences and 6 untreated milk licences were in operation.

Inspection of all premises is carried out before new licences are issued, and systematic sampling is arranged to give coverage to all licensed dealers according to the types of milk being sold. Retail sampling of producer-retailers is also carried out, os is the sompling of milk supplied to county premises such as children's homes, schools, old people's homes and day nurseries.

The sampling moy be summorised as follows:

	UNTREATED	PASTEURISED	STERILISED	UHT
Schools	17	746	—	—
County Premises	—	188	—	—
Dealers	2282	2784	475	148
	2299	3718	475	148

The appropriate stotutory tests were carried out on all these samples and with the exception of 219 untreoted samples and 227 pasteurised somples, which failed the methylene blue test (for cleanliness and keeping quolity) they oll proved to be sotisfactory.

All failures are notified to the persons involved with the particular sample ond where necessary the circumstances of the failure ore investigated by the County Public Health Officers. Normolly the cause of the failure is found to be either incorrect storage, or the age of the milk at the time of sampling (incorrect stock rototion). Repeot sompling is carried out to ensure that the unsotisfactory conditions have been remedied.

Routine samples of washed bottles are collected from the untreated milk bottlers holding a county licence. A total of 203 bottles wos examined during 1971, 158 of which were satisfactory, 4 foirly satisfactory ond 41 unsotisfactory. The majority of the poor results were from one doiry where improvements were effected and the trouble resolved.

(c) **Cream**

A totol of 37 samples of raw cream was submitted for brucella examination. All proved negative.

(d) **Sampling Summary**

The following table summarises the whole of the milk sampling carried out by the department.

		SAMPLES TAKEN		
PREMISES OR DISTRIBUTION	NUMBER	MILK	WASHED BOTTLES	CREAM
Processing Dairies (Pasteurising or Sterilising)	14	2843	1008	—
Schools (excluding Crewe)	616	763	—	—
County Estoblishments	100	188	—	—
Dealers ond Producer-Retoilers	1299	5738	203	37
Farms (inc. individuol cow samples)	185	1897	—	—
Totols	2214	11429	1211	37

WATER SUPPLIES, SEWERAGE AND SEWAGE DISPOSAL

The section continues to take a very active interest in the provision of these basic services throughout the county, and keeps in touch generally on problems arising and schemes proposed and in progress.

(a) FINANCIAL ASSISTANCE TO DISTRICT AUTHORITIES

During the financial year which ended on 31st March 1972, a total of £64,702 was contributed by the county council to county district councils which qualified for assistance under the Rural Water Supplies and Sewerage Acts 1944-71, and £17,241 under section 56 of the Local Government Act 1958, i.e. £81,943 in all.

(b) SCHEMES OF WATER SUPPLY, SEWERAGE AND SEWAGE DISPOSAL

During the year under review seven schemes of sewerage and sewage disposal estimated to cost in total £250,797 were submitted by district councils for grants under the Rural Water Supplies and Sewerage Acts 1944-71. All the schemes were investigated in detail and, subject to agreed amendments in some cases, were approved in principle. No schemes of water supply were submitted.

In addition two applications were received from district councils seeking assistance from the county council under the terms of section 56 of the Local Government Act of 1958 and one application was received for the increase of an annual payment already agreed, because the scheme when carried out cost considerably more than had been estimated. Section 56 of the 1958 Act empowers the county council to "make any contributions the council thinks fit to expenditure of the council of a county district in the county." The two new applications totalled £3,178,000 in estimated costs and involved works of sewerage and sewage disposal which did not rank for grants under the Rural Water Supplies and Sewerage Acts. These two schemes were examined by the department from a technical standpoint. The county council's policy is to make contributions under this section only in the case of schemes which would impose an exceptionally heavy additional burden on the ratepayers of the area. One major sewerage and sewage disposal scheme estimated to cost £3,101,000 was given financial aid amounting to £9,000 per annum from 1st April 1972 to 31st March 1974. The other scheme was not approved for the purposes of assistance. The application for an increase in the annual payment was agreed, from £10,000 per annum to £12,500 per annum until 31st March 1974.

(c) LOCAL INQUIRIES AND INVESTIGATIONS OF THE MINISTRY OF HOUSING AND LOCAL GOVERNMENT

During the year, inspectors of the Ministry held a number of inquiries into sewerage and sewage disposal schemes, and the department was represented at each by the county public health officer.

(d) FLUORIDATION OF WATER SUPPLIES

The first report to County Health Committee on this subject was in February 1963. It is therefore gratifying to be able now to record that at its meeting on 3rd March 1971 the County Health Committee approved the policy of adjusting the fluoride level in the county's water supplies to one part per million, and that this was confirmed by resolution of the County Council at its meeting on 29th April 1971.

As a result of this, approaches were made to the two water authorities serving areas wholly within the administrative county, namely the Mid-Cheshire Water Board and the Macclesfield Water Board, requesting them to prepare schemes. The Mid-Cheshire board agreed to do so, but the Macclesfield Board have so far refused. The Stockport and District Water Board have also been requested to take steps to implement the County Council's policy, and the two other local health authorities involved, Derbyshire County

Council and Stockport County Borough Council, made similar requests. The Water Board are accordingly now preparing schemes to deal with their supplies. Because of decisions against fluoridation by certain local health authorities, and in two cases by Water authorities, it seems that at present the Mid-Cheshire Water Board and the Stockport and District Water Board are the only two water authorities (of the nine serving the county) who will be proceeding with fluoridation schemes. This is a regrettable situation but one which will no doubt be remedied from 1st April 1974.

GENERAL

(1) Liaison with County Planning Department

The department is being increasingly used by the planning department for comments on the public health aspects of planning applications.

During 1971, 48 applications for planning approval covering a wide range of activities were referred to the department and in each case full consideration of all public health aspects was given by the county public health officer and reports submitted for the assistance of the planning officers. In addition the county public health officer attended a number of meetings of applicants and officers when the particular public health aspects of proposals were discussed.

(2) Liaison with County Surveyor's Department

Applications for the disposal of sewage effluent by connection into county council surface water drains are reported upon by the department. During the year a meeting of officers took place together with representatives of the River Authority, to discuss pollution problems in existing county council surface water drains. A policy for future action was agreed.

Schemes of water supply, sewerage and sewage disposal dealt with by the department are also discussed with the county surveyor's department so that any matters affecting highways can be raised and dealt with.

(3) Nursing Homes, Old Persons' Homes, Disabled Persons' Homes, Day Nurseries and Play Groups

The county public health officer's section has continued to assist in work connected with the registration of these premises, particularly when difficulties arise with regard to structure, and sanitary and food hygiene arrangements. Plans for new homes, or for extensions or adaptations, are also examined and suggestions made with a view to obtaining the best possible conditions and facilities.

From the 1st April 1971 the Department of Social Services became responsible for the registration of these premises with the exception of nursing homes which are still the responsibility of the health department.

(4) Food Hygiene

Matters of food hygiene continue to play an important part in the work of the section, particularly the routine inspections carried out in connection with the school meals service. A full report on this work is contained in the school health report for 1971.

The county public health officer maintains close liaison with the county catering organiser and studies the developments taking place in this field. In the early part of the year a study was made into cooking by micro-waves. Recommendations were made and implemented, resulting in cooked meals being available where otherwise this would not be possible.

The code of practice on kitchen hygiene prepared jointly by the Education and Health Departments has now been issued to all county food premises including the school meals service. The county public health officer acted as co-ordinator for this project, and the publication has proved to be most useful and has standardised procedures throughout county premises.

The formulation by the health department of a code of practice on pre-cooked frozen food is well advanced. This is in preparation for the proposed pre-cooked frozen food pilot scheme which is to be launched by the school meals service in the autumn of 1972.

The food hygiene requirements in relation to the proposed code for the construction and equipment of food premises have been circulated, and preparation of the code is still proceeding.

(5) **Environmental Working Parties**

The county public health officer has served on a Working Party studying pollution problems in the Warrington area, a Committee set up to study the results of monitoring of the environment around the new Fibreglass Factory near Wrexham, a Committee formed to deal with the pollution of the River Mersey, and a Working Party set up to establish sites in the county for gipsies. He is is also keeping in touch with the work of a small Working Party examining the problems of the disposal of industrial wastes in the Upper Mersey valley.

OCCUPATIONAL HEALTH

OCCUPATIONAL HEALTH

The additional occupational health service centre in Mid-Cheshire referred to in the 1970 report was established and equipped during the year, and Dr. Rich was able to use the facilities of this centre for cases referred to him from the Crewe, Mid and East Cheshire areas. The three centres now fully operational are at Chester, Weaverham and Gatley.

CLINICAL WORK

During the year, the preventive medical examinations offered to senior staff were continued and it was decided to extend this facility to staff in the middle management category. During the year 1971, 146 members of staff were offered the examination, of which 92 were examined during the year. In addition there were 37 routine re-examinations carried out, these being in addition to those members of staff who were re-examined where a particular condition was indicated.

The medical examination of heavy goods and public service vehicle drivers was also continued during the year. 80 examinotions were carried out, and 9 re-examinations.

The form of reference, which was originally designed for cases of protracted sickness absence, was revised to give employing departments the opportunity of referring other problem cases, for example where o medical opinion was required to ascertain whether certain staff were fit to continue in the service of the county council or whether by reason of some permanent disability, premature retirement was indicated in the interest of both employer and employee. It should be noted that before such o medicol examination was carried out, the employer's permission was always sought, to enable the occupational health medical officer to approach the family doctor or consultant for information. 100 such cases were referred to the occupational health service, 51 of which were prematurely retired from the service of the county council. It was encouraging to note that many of the problem cases referred to the occupational health service did not have to leave the service of the authority, ond after consulting the medical officer ond receiving appropriate advice, made a satisfactory return to their employment. Still one of the biggest disappointments to the medical officers of the service is the lack of resettlement facilities. If a person is found to be unfit for his particular employment it is virtually impossible to re-settle him in alternative work within the county council. This is a problem which must be given serious thought, so thot staff who are unfortunate in having a breakdown in health and are referred to the occupational health service realise that if medically possible, facilities are there to provide alternative work within the county council, and that it will not be a means of dispensing with the services of staff who for health reasons are unable to work at full capacity in their particular jobs.

The fire brigade department made full use of the facilities of the occupational health service and during the yeor 17 members of the fire department were referred for medical advice. All the occupationol health medical officers had attended a special fire-fighting demonstration and so were well aware of the particular hazards involved and the standard of medical fitness required. It was appropriate therefore that the medical examination of all newly appointed full-time firemen should be undertaken by the occupational health doctors, and also that their special knowledge and expertise should be available to the chief fire officer for any problem cases he moy wish to refer to the service. It is anticipated thot 40 newly appointed firemen will be referred each yeor.

During 1971 further instructions were received from the Home Office regarding the periodic check-up of firemen over the oge of 40. 123 examinations will be required initially and work in this connexion will be storted early in 1972. It is expected that 150 men in the fire brigade will require a three-yearly medical examination over the next few years.

A very important part of the doctors' clinical activities has been the consultations thot hove been initiated by the staff themselves. It is encouraging to note that in several instances the help and odvice given on a personal health problem has been much appreciated by the staff concerned.

ENVIRONMENTAL MATTERS

One of the objects of on occupational health service is to protect workers against any health hozard which may arise from their work or from the conditions in which it is corried out. It is for this reason that two medical officers of the occupotional heolth service paid a visit to the M6 Sandbach works unit, accompanied by local and county public heolth officers. The purpose of the visit was to inspect the working environment in general and to estimate exposure of workers to noise. The motter is currently being studied.

The question of sickness absence recording was considered and the setting-up of recording machinery for coping with sickness absence was investigated. Visits were made by the occupational health medical officers to London Transport Executive and two other selected organisations who were running on occupational health service, so that monagement and other organisotional procedures could be inspected. It is hoped that eventually centralised sickness recording machinery will be set up, which will be of value in the future work of the occupational health service.

From information received towords the end of 1971, it seemed opparent that an influenza vaccination programme would have to be arranged. It was decided to offer the injection to oll "key personnel" of the county council and with the co-operotion of the various deportments 2,251 members of stoff in this cotegory were offered the injection. 1,639 members of staff completed the request forms but for vorious reosons such os hoy fever, asthmo ond vorious allergies, the number of staff actually vaccinated wos reduced to 1,397. For Chester-based staff, two sessions were orronged at County Hall, where 267 injections were given. The other field ond orea staffs sessions were orronged in the vorious parts of the county and in all a totol of 1,130 injections were administered. It was not possible for the occupationol health team to carry out the entire vaccination programme ond I am therefore indebted to divisional medicol officers in oll oreos for their ossistonce in carrying out this progromme.

A follow-up investigation into the efficiency of the vaccine will take place.

LIAISON WITH UNIVERSITIES AND HOSPITALS

Again the medicol officers of the service are grateful to Professor Scott of the University of Manchester for his advice and guidance on occupational heolth matters. Professor Scott recently retired but we ore fortunate in having the services of Professor Lee for future consultations and advice.

Professional advice is also reodily avoilable to the service from consultants in medicine and rodiology at the Chester Royal Infirmary and we are grateful to the special unit at Sefton General Hospital for the facilities for blood exominotions. 127 samples of blood have been examined during the year. Ten employees had abnormal blood fat potterns and all hove been given appropriate odvice ond treatment.

Agoin tolks on the function of an occupational health service have been given to county council persconnel in the course of the in-service training programme.

On occasions during the year the occupational heolth service was called upon to ossess the percentage of injury disability in connexion with the county council superannuation scheme. Three of the occupational health medical officers formed a board to assess the cases referred.

In the forthcoming months the examination of school crossing patrols will be undertaken by the service. It is considered necessary that all school crossing patrols should be medically examined on reaching the age of 65 and annually thereafter.

Periodic vision and hearing tests should be given to all other school crossing patrols every five years. This would be undertaken during 1972 and it is hoped that some assistance with the vision and hearing will be given by the oudiometricians working in the child heolth section, who will undertake the preliminory screening of both the hearing and the vision using the Keystone vision testing device.

VACCINATION AND IMMUNISATION

VACCINATION AND IMMUNISATION

By the end of the year the computer-based appointments system was operational in all divisions of the administrative orea. In oddition the number of participating general proctitioners rose to 60% af the total practising in the orea, an increase of 32% on lost year. This increose is due mainly to health visitor attochment which hos relieved generol practitioners of much routine work at sessions held at surgeries. It is expected thot many more general proctitioners will be phased into the scheme in the near future, and it is encouraging that many of those already participating have expressed their appreciation of the advantages gained from the system. As o result, immunity indices hove risen, ond if present trends continue it is expected that 87% of children living in Cheshire will have been protected against the variaus infectious diseoses before entering school.

The backlog of measles appointments which existed at the end of 1970 caused by the shortage of vaccine hos now been cleored. Initiolly it wos decided to offer only one oppointment in an effort to clear outstonding treotments as quickly as possible. Appointment schedules are now back to normal, which means thot porents are offered a maximum of three appointments, as is the procedure for the other infectious diseases.

The voccination ond immunisotion sub-committee which advises the Minister hos expressed the opinion that vaccinotion ogoinst smallpox need not now be recommended os o routine procedure in eorly childhoad. In view of this recommendation, it hos been decided not to offer any further appointments for smollpox voccinotions, olthough there is provision on computer file to recard voccinotions given to children at speciol risk.

RESEARCH

RESEARCH

1971 was a year of consolidation for the section. Few short-term projects were braught to fruition during the period, but a number of lang-term projects were commenced and shauld yield some valuable results at a later date. During the year Mrs. S. Harper left the department, and was replaced as assistant research officer by Mrs. A. Coffey, B.A., the first persan to be appointed directly ta the section.

The work of the section with regard to the library, reports and committee work has cantinued unabated, as has the provision of information and statistics ta other sections of the health department. The impending re-organisation af the health services in 1974 has produced a big increase in demands from many quarters far a wide variety of data related to health service need and provision; this has often required special compilation fram several sources and on occasions has been expressed in cartographic form.

A large part of the work of the sectian over the past 12 manths has related to the development of computer-managed screening services. These have been designed primarily to pravide an effective public service but are also intended ta yield statistics which will prave valuable for organisational and epidemialogical research. During the year design of the develapmental paediatric screening service has been carried fram first principles ta the point af being ready far implementatian af the first stages; thraughaut this the research section has played an impartant part. At the same time the cervical cytolagy scheme has been expanded, and by the end af the year arrangements had been finalised for extension of this service ta faur tawns.

Two canventional research prajects were undertaken during 1971. A study was made af all the home accidents in two large areas of the county, based an calls to the ambulance service fallowed up by health visitor questiannaires. Analysis af the results will only be completed after the end of the year, but an analysis after six months indicated a gaad response. Dealing with children, a study was instigated inta the pattern and causes af past-neonatal infant mortality. Because af the much smaller numbers involved this project will have to be carried aut over a number af years.

The research section was involved in the evaluation of twa new services, with a view to assessing the benefits and aptimum arganisatian af each. One relates to geriatric screening, and is being carried aut in conjunction with three general practitioners in one area of the county. The second praject cancerns the pattern of referrals and response to the domiciliary family planning service as proposed for the five initial areas.

The research section alsa continued to liaise with research projects being canducted by other agencies. In particular, interest was expressed in an assessment of the yaung chronic sick being carried aut in co-ordinatian with a hospital in the caunty, and discussions were held with the social services department concerning means af assessing the numbers and needs of the handicapped—a field in which the section had previously made its own contribution. The research section was also the focal point in the department for co-operatian with agencies carrying out research projects aver a wide area—far example the department continued to co-aperate with a study being carried out by Oxfard University into certain childhood illnesses.

Interest in the work of the sectian has continued to be maintained by outside badies, and this raises the possibility of useful co-operation. At a meeting in Dublin in September the research afficer was elected to membership of the Society far Social Medicine. The forthcoming year pramises the production of results from a number of the projects currently in hand, as well as the carrying out of a number of smaller projects.

AMBULANCE SERVICE

AMBULANCE SERVICE

The operational problems of last year due to the great delay in the delivery of new vehicles have now been overcome. Thirty-six new vehicles have been taken into service and are proving most successful. The vehicles, based on the Bedford 25 cwt. CF chassis, provide an excellent ride for patients and stretcher cases are now carried within the wheelbase, a real advance in design. An additional twenty-two vehicles of similar design will be added to the fleet next year.

Equipment has been improved and all ambulances are now equipped identically, having the latest aspiration, resuscitation and oxygen therapy equipment.

The major staff project this year has been the introduction of work-measured incentive bonus schemes. This task in the Ambulance Service has required team work at all staff levels, and the methods used and the eventual schemes have been examined by some forty authorities. Tribute must be paid to all the staff in the Service, and to the untiring efforts and imagination of the Management Advisory Unit whose staff produced the schemes. As the demand on the Service increases and varies, incentive bonus schemes will be under regular review.

The number of patients involved in accidents and emergencies rose by 2,195 to 27,120 for the year, further emphasising the state of readiness which has to be maintained.

On the afternoon of 2nd June 1971, a train returning school children from a visit to Rhyl crashed at Wavertan, one coach overturning. Ambulances from Tattenhall, Ellesmere Port, Crewe and Chester County Borough attended and staff recovered one fatal and twenty-two live casualties. Five seriously injured casualties were taken to Chester Royal Infirmary and the seventeen slightly injured to Wrexham Hospital.

On 13th September 1971 an accident between two heavy vehicles on the M6 motorway in early morning fog resulted in the worst road traffic disaster recorded. Vehicles were struck in the rear and the catastrophe extended over two miles on the north-bound lanes south of the Thelwall viaduct. Nine ambulances from Grappenhall, Knutsford, Altrincham and Northwich attended immediately and rescued nineteen casualties. There were also ten fatal casualties. The standard of patient care was high and justified all the time and effort spent on training. Many casualties and deaths were caused by burning petrol. The time has surely come when vehicle petrol tanks should be self-sealing and better protected.

Accidents emphasise the need for the closest working relationship between police, fire and ambulance personnel. The goodwill and team spirit between the emergency services in the county is excellent and combined training is held regularly.

A major accident exercise in the Macclesfield area on 17th October 1971, when the effects of an airliner crashing on a remote hillside were simulated, demonstrated the effectiveness of a special 'control vehicle' for ambulance purposes. 'Control vehicles' with local radio communications will be introduced in 1973.

A total of 533 ambulancemen have used the Wrenbury Ambulance Training School during the year, being drawn from the following authorities:

County Councils:	Anglesey, Caernarvonshire, East Riding, Derbyshire, Hereford, Flintshire, Merioneth, Montgomeryshire, Denbighshire, Cheshire.
County Boroughs:	Birkenhead, Chester, Derby, Wallasey, Stockport.
Northern Ireland:	Northern Ireland Hospitals Authority.

The Department of Health and Social Security makes extensive use of the training facilities for training instructors and holding studies on ambulance matters, e.g. radio networks and major accident planning. Since the training school was introduced in October 1967, 1,892 persons have received instruction there.

Wrenbury Hall is included in the national training scheme of the Local Government training Board and plans for its improvement and development are being made.

Area ambulance supervisors undertake regular lectures in 'Ambulance Aid' to all Fire Brigade personnel who in turn give specialist instruction to ambulance staff.

A first aid course was provided for the staff of the countryside officer who may find themselves faced with injured people in remote areas. Emphasis was placed on resuscitation as countryside staff may encounter persons in difficulties in the many lakes and waterways in the county.

In conjunction with the Health Education Officer successful first aid courses have been held by ambulance instructors for school teachers. Similar courses are being organised for lecturers in physical education. The hospital authorities have been most helpful in organising hospital experience for ambulancemen. Staff are attached to a hospital for ten separate days and given instruction in recovery rooms, plaster rooms, casualty departments and theatre.

Twenty supervisory staff have been sent on supervisory courses under the auspices of the North Western Provincial Council and two short courses in aspects of management have been held at Wrenbury. These courses have certainly improved line management and increased young officers' confidence in their day-to-day tasks.

Emergency plans have been developed to deal with the special risks in chemical and petroleum plants at ICI and Shell installations. Exercises are held regularly and special equipment has been ordered.

The year's statistics reveal the increasing general work load:

	1970/1	1971/2
Journeys	66,749	45,743
Patients	374,848	394,992
Mileage	2,148,472	2,262,970

The increase in day hospital and psychiatric activity is responsible for a large portion of increase in patients carried. The reduction in journeys reveals the competent planning of central staff.

STAFF ESTABLISHMENT

The staff establishment at 31st March 1972 was:

Designation	No. of posts
County Ambulance Officer	1
Deputy Ambulance Officer	1
Assistant Ambulance Officer (Control)	2
Superintendents (Area and Training)	7
Station Officer Class II (Instructors)	3
Station Officer Class II (Central)	15
Station Officer Class I	10
Sub-Officer	30
Ambulanceman/Sitting case vehicle driver	253
Telex operators	3
Mechanics	6
Others (Cleaners, domestic, etc.)	7
Attendants (part-time retained)	16
TOTAL ...	354

After a successful Service competition at Christleton in May 1971, the winning ambulanceman, P. D. Price of Crewe, won the north-west regional competition, and tied for first place at the National Ambulance Competition in Harrogate. The County Health Committee awarded certificates of commendation to Ambulancemen H. Humphries (Dukinfield), P. D. Price (Crewe) and A. J. Clarke (Crewe) for outstanding work in dangerous situations.

HEALTH EDUCATION

HEALTH EDUCATION IN SCHOOLS—EVENING COURSE FOR PARENTS

HEALTH EDUCATION

How important is health? When asked this question, the individual inevitably answers "very". We look around us and see those who have been stricken with disease or die prematurely, and if we are feeling healthy, we say we have a lot to be thankful for. However, put that question to the community generally, relating it to economics, and there is a vastly different answer. Yes, we should like the individual to be healthy, but how much is it going to cost? Is it not time for us to consider whether we really want people to obtain optimum health and whether we are prepared to pay for it? The alternative is to say, let people take their chance. Surely those responsible for considering the health of our community do not really want this, but they often seem to want the best of both worlds, to have a healthy nation and not to pay for it. The answer may well be "but we do pay for it, the Health Service costs £1,500m. per annum." This is true, we spend a vast number of pounds helping people to recover after contracting a disease, but how much is spent trying to prevent those same people getting the disease in the first place?

In previous reports much has been said on the purposes of health education and at the same time it has been admitted that it is not an easy task to change people's behaviour and habits built up over a lifetime. Of course it will take time, probably many years, before measurable results are available, but does that justify doing very little now? The co-operation of health department field staff in carrying out health education has been very satisfactory, but many areas still remain unexplored and this can only be carried out by those in full-time health education. To involve schools, factories, youth clubs, etc., in a programme of health education requires personal contact, discussing the purpose of health education and the role they can play and how to play it. Contact by correspondence does not have the same result as contact by person, but this is, of course, very time-consuming and how to carry out this function satisfactorily while at the same time running the remainder of the service is one of the major difficulties being experienced at the present time.

In July 1971 the position was somewhat relieved by the appointment of Mrs. L. Rodger, B.A., to the post of assistant health education officer. She has involved herself in the organisation of training courses, home safety, and display work and this has relieved the pressure to some extent.

HEALTH EDUCATION IN SCHOOLS

In the 1970 report, reference was made to the working party report "New Look at Health Education in Schools" and its distribution to all schools, followed by a series of meetings with head teachers to discuss the implementation of health education in schools. During the year, courses were organised at three teacher training centres. Many schools of course are active in health education and it is very gratifying to report that we received 68 requests for assistance during the year and this does not include the talks, details of which are reported elsewhere. With the help of staff from the Ambulance Training Unit, Wrenbury Hall, a further course for teachers on Emergency First Aid was organised. It was well attended and again indicated the concern of many teachers that they lacked the knowledge to deal competently with emergencies that arise in schools. The fact that 757 accidents were reported in schools during the year shows the extent of this problem. This course is a valuable one to run and further courses will be held in the future.

VOLUNTARY ORGANISATIONS

Co-operation has continued with voluntary bodies associated with health education and the following organisations may be mentioned.

The Cheshire Branch Family Planning Association

The health education officer was again elected to serve a further term on the executive committee. This has been an exciting year for the Branch as after much discussion, it is to be

merged with the Merseyside ond Manchester Branches to form two larger Bronches in accardance with future Family Planning Association policy. Due to the resignation af the branch administrator and the merger involvement, much of the projected work associated with the health educotion officer's repart of 1970 had to be shelved. It is hoped that once the new branches are functionol, work can ogain continue on this project.

Manchester Regional Committee on Cancer

At the request of the executive afficer, 8 clinics co-operated in evaluating two new style posters on cytolagy. The most impartont foct that emerged from this study was not which poster was most effective, but thot a third of oll respondents did not recoll seeing ony poster at all (olthaugh there were on overoge of about 7 posters on display on a variety of health tapics). This must reinforce what has often been said before, that posters on their awn cannot be relied on ta provide oll informotion and thot it would be wrang to use this medium only ta discharge the duty af health educotion publicity. We also hod a request from one firm to carry out a poster campaign on smoking and health. Three Health Education Council posters were displayed one at o time aver a period of three months. Agoin, with the co-operation of the Manchester cammittee, some measure of effectiveness was secured. A questionnaire wos produced far employees to complete before the campoign, and o further questionnaire ot the end of the campaign. The results are now being analysed. It is worth while noting that in this case industry had expressed on interest in health education, so much of this work is directed at school children and mothers thot the working populotion is often overlooked. Here is a vast field tawards which a heolth educotion programme could be directed, porticularly on such aspects as birth control, heart disease, cancer, venereal diseases and pre-retirement.

The health education officer continued to ottend the meetings of the West Cheshire Advisory Committee an drug obuse and our main cantribution to this Committee wos the forming of a smoll working party to consider a programme of education on the drug problem far those responsible for young people. The outcome of the deliberations wos the formation of a speakers' panel consisting of a doctor, police officer ond probation officer, the ideo being that we could put across the medical, legal and sacial aspects of drug abuse. This ponel became octive in November and carried aut twa engagements ta the end of the year.

Home Safety Voluntary Committee

The health education officer or ossistont ottended five meetings of the Lancashire and Cheshire Hame Safety Council. This body consists of representotives fram all valuntary cammittees in the two counties and does valuable work such as discussing home accident hazards which are braught to their attention. The necessary oction is decided upon and the apprapriate caurse followed. The following are one ar two examples of their efforts during the year.

The Bebington Home Safety Committee reparted ta the Cauncil the fact that a well known firm of cleaners wos distributing plastic bags through letter baxes. The Cammittee resolved to repart the matter to the National Home Safety Cauncil.

At ane af the meetings, delegotes were shown a painting book called "Mogic Fun Boak" which depicted drawings of how to light a match inside one's pocket and various other dangeraus tricks. This had been on sole at a chain store, and after the publishers had been contacted the affending pages had been withdrawn.

The Bebingtan Valuntary Hame Safety Cammittee exhibited at the county show and Bebingtan show and the county council provided display materials.

The Altrincham, Bowdon, Bucklow, Hale & Lymm Hame Safety Committee had a campaign warning of the dangers of fireworks. Again the county assisted by providing suitable pasters for display in general practitioner surgeries.

The health educatian officer in company with the deputy caunty medical officer attended meetings af the Rural District and Borough Councils to speak on the need for local authority participation in hame sofety. Unfortunately, althaugh quite a lot of interest oppeared ta be generated, no action has yet been forthcoming.

CAMPAIGNS

The first major project took place in May with a health week in Congleton. The council lent the Town Hall for the week, and displays were provided on immunisation, drug abuse, first aid, smoking, home safety, nutrition, dental health, good heolth, birth control, aids for the hondicopped, food hygiene and housing. All schools were invited to send parties and the response was good, some 215 children attending. During the week three lectures were arranged in the evening on concer, drugs and dental health, these meetings being open to the general public. However, the attendances were rather disappointing and it does appeor thot very much more publicity will have to be given throughout the the district on future occasions. This was the first health week ond many lessons were learnt from the exercise.

The Congleton Borough Council showed great interest and provided the Town Hall for the venue of the campaign; the Mayor and Mayoress attended the opening session. The Chairman of the Heolth Committee attended the three evening meetings to act as Chairman to the visiting lecturers. Interest was also shown by the local press and rodio and very good coverage was given by both media.

The displays produced for this compaign have since been used extensively throughout the county in health clinics and elsewhere.

LECTURES

An advertisement was inserted in the local newspapers drawing attention to the Health Education Service for Voluntory Organisations. As a result several organisations requested talks on a variety of subjects. This was the first full operational year for staff who attended the In-Service training course and our records show that 54 local organisations were visited.

Schools were also advised of the service provided by health staff, although they are encouraged to use outside speakers in context with the health education programme corried out by the teaching staff and a total of 83 schools requested this service.

Breaking down the figures, the most requested talks by all sections of the community were on ospects of the health and social services, home safety, sex education, first aid, drug obuse.

In conclusion, I should like to draw attention to the useful co-operation that has been received from all the professional and administrative staff of the department. Health education can have no boundaries and its work of necessity involves all sections of the department. Without their help ond consideration, planning and organisation of health education would prove an impossible task.

HEALTH SERVICES STATISTICS

CHILD HEALTH AND NURSING SERVICES

DENTAL SERVICE (MOTHERS AND YOUNG CHILDREN)

	Children 0—5	Expectant & Nursing Mothers
Visits for treatment	5651	2167
Number of teeth filled	3038	1371
Number of teeth extracted	1821	734
Patients given first inspection	3288	592
Number of such patients requiring treatment	2047	581
Number offered treatment	1995	579

ANTE-NATAL CLINICS AND RELAXATION CLASSES

Ante-Natal Clinics				Relaxation Classes
No. attending for Examination		No. of Sessions held by		
Ante-Natal	Post-Natal	Midwives	Doctors	No. Attending
13878	98	329	715	4427

CHILD WELFARE CENTRES

	Health Centres	Clinic Centres			
		Purpose Built	Adapted	Sessional	Total
Number of premises in use 31.12.71	12	37	24	60	133

No. of Children attending				No. of Sessions held			
Born 1971	Born 1970	Born 1966/69	Total	Medical Officers	Health Visitors	G.P.s	Total
16946	10094	8865	35905	1113	524	5033	6670

PREMATURE BABIES

Weight at Birth	No. born Alive	Died in first 24 hours	Died 1—27 days
2 lbs. 3 ozs. or less	28	16	8
Over 2 lbs. 3 ozs.	44	13	8
Over 3 lbs. 4 ozs.	175	15	11
Over 4 lbs. 6 ozs.	174	8	2
Over 4 lbs. 15 ozs.	341	6	3
Total	762	58	32

WORK OF HEALTH VISITORS

Category	Number of Cases visited
Children aged up to 5 years	62329
Persons aged 65 or over	10304
Mentally disordered persons	724
Persons discharged from hospital (excluding maternity cases and mental hospitals)	763
Number of tuberculosis households visited	514
Number of households visited on account of other infectious diseases	138
Other cases	4203

NOTIFICATION OF BIRTHS (LIVE AND STILL)

Distribution of births notified under Public Health Act 1936:

Domiciliary	Institutional	Total
2281	16066	18347

WORK OF HOME NURSES

Number of Persons Nursed during year	Number of Persons Nursed who were aged (at 1st visit) Under Five years	65 years and over
21504	390	13739

WORK OF MIDWIVES

Number of domiciliary confinements attended				No. of hospital confinements discharged before tenth day
Doctor not booked		Doctor booked		
Dr. present	Dr. not present	Dr. present	Dr. nat present	
11	28	369	1,947	13,852

NURSING SERVICES—STAFF EMPLOYED 30.9.71

Category	Whale-time	Part-time	W.T. equivalent of P.T.
Health Visitor/School Nurse	172	—	—
Home Nurse	137	57	38
Midwife	90	57	19
Supervisory (home nursing and midwifery)	8	—	—

CERVICAL CYTOLOGY

Number of sessions	Number of patients	Total attendances	Results of Examinations (a) N.A.D.	(b) For Invest.	(c) Number in (b) found Positive
1,306	15,437	16,309	15,604	373	63

CONGENITAL MALFORMATIONS

During 1971 there were 294 cases notified, as compared with 279 for 1970.

VACCINATION AND IMMUNISATION

VACCINATION OF PERSONS UNDER AGE 16 COMPLETED DURING 1971

TABLE 1. Completed Primory Courses—Number of persons under oge 16:

	TYPE OF VACCINE OR DOSE	YEAR OF BIRTH 1971	1970	1969	1968	1964-67	Others under age 16	Total
1.	Quadruple D.T.P.P.	—	—	—	—	—	—	—
2.	Triple D.T.P.	429	9016	3775	505	1057	421	15203
3.	Diphtheria/Pertussis	—	—	—	—	1	—	1
4.	Diphtheria/Tetanus	—	—	—	14	208	146	368
5.	Diphtheria	—	—	—	—	4	10	14
6.	Pertussis	—	—	—	1	64	—	65
7.	Tetanus	—	—	—	1	131	314	446
8.	Poliomyelitis, Salk	7	43	18	2	2	—	72
9.	Poliomyelitis, Sabin	410	9016	3771	409	1416	299	15321
10.	Measles	14	4653	4985	1725	1737	194	13308
11.	Rubella	—	—	—	1	1	3062	3064
12.	Lines 1+2+3+4+5 (Diphtheria)	429	9016	3775	519	1270	577	15586
13.	Lines 1+2+3+6 (Whooping Cough)	429	9016	3775	506	1122	421	15269
14.	Lines 1+2+4+7 (Tetanus)	429	9016	3775	520	1396	881	16017
15.	Lines 1+8+9 (Polio)	417	9059	3789	411	1418	299	15393

TABLE 2. Reinforcing Doses—Number of persons under age 16:

	TYPE OF VACCINE OR DOSE	YEAR OF BIRTH 1971	1970	1969	1968	1964-67	Others under age 16	Total
1.	Quadruple D.T.P.P.	—	—	—	—	—	—	—
2.	Triple D.T.P.	—	63	204	291	1700	287	2545
3.	Diphtheria/Pertussis	—	—	—	—	377	50	427
4.	Diphtheria/Tetanus	—	7	15	713	11615	1464	13814
5.	Diphtheria	—	—	—	—	55	32	87
6.	Pertussis	—	—	—	3	—	—	3
7.	Tetanus	—	—	—	13	197	1714	1924
8.	Poliomyelitis, Salk	—	—	—	—	—	—	—
9.	Poliomyelitis, Sabin	—	2	4	481	9349	3852	13688
10.	Lines 1+2+3+4+5 (Diphtheria)	—	70	219	1004	13747	1833	16873
11.	Lines 1+2+3+6 (Whooping Cough)	—	63	204	294	2077	337	2975
12.	Lines 1+2+4+7 (Tetanus)	—	70	219	1017	13512	3465	18283
13.	Lines 1+8+9 (Polio)	—	2	4	481	9349	3852	13688

VARIOUS

CONVALESCENCE

Canvalescence is given to appraved applicants, usually two or three weeks after a period of illness at home, for whom a medical recommendation has been received.

The numbers of persans far whom recuperative convalescence was arranged were as follows:

1970	1971
166	121

CLINICS FOR OLD PEOPLE

	Number of sessions held	Number of new patients	Total number of patients	Total attendances
Geriatric (Consultant) ...	112	185	674	1042
Health Advisory ...	68	143	484	1372

FAMILY PLANNING

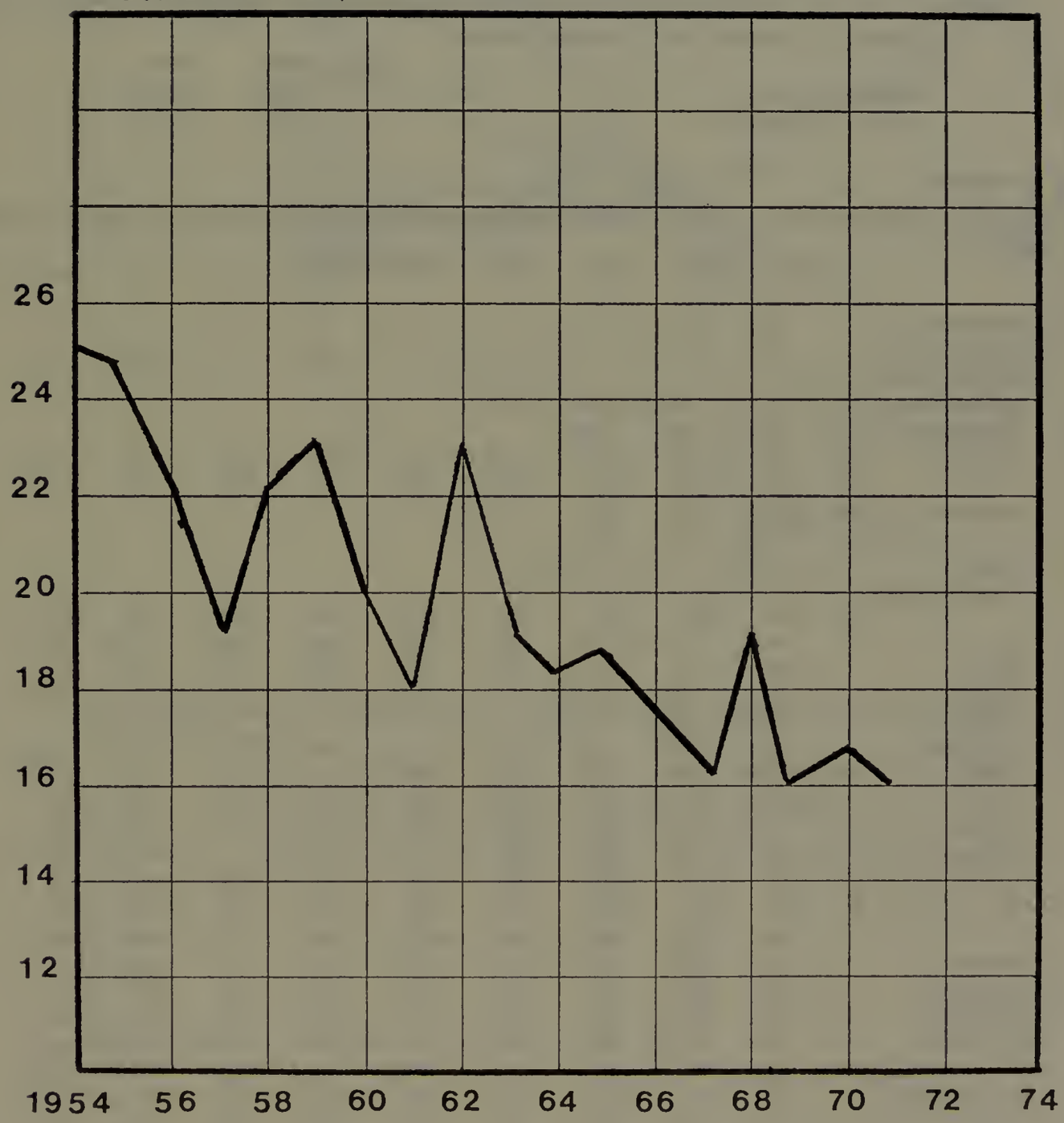
During 1971, attendances of Cheshire residents at family planning clinics held at county clinic centres and at centres in adjacent areas numbered 49,085, and there were 6,438 new cases.

COMPARISONS OF VARIOUS RATES WITH PREVIOUS YEARS

	1971	1970	1969	1968	1967	1966	1965	1964	1963	1962
Live Birth Rate (per 1,000 papulation)	16.5	16.3	16.4	17.2	17.7	17.8	18.1	18.6	18.3	18.0
Illegitimate as percentage of Total Live Births	6	6	6	6	5.9	5.1	4.6	4.4	3.7	4.2
Stillbirth Rate (per 1,000 Live and Still Births)	12	12	13	14	15	14.6	16.3	15	18.1	17.5
Death Rate (per 1,000 population)	11.0	11.5	11.3	11.4	11.3	11.6	11.4	11.3	12	12.1
Infant Mortality Rate (deaths under 1 year to 1,000 live births)	16	17	16	18.6	16.3	17.2	18.6	18.1	18.7	23.6
Neo-natal Martality Rate (deaths under 4 weeks to 1,000 live births)	11	11	12	13.4	10.9	11.7	13.1	12.6	12.3	14.6
Early Neo-natal Mortality Rate (deaths under 1 week to 1,000 live births)	9	9	10	11.2	9.6	10.3	11.1	11.0	10.6	12.1
Perinatal Death Rate (still births and deaths under 1 week per 1,000 births live and still)	21	22	23	25	24	24.8	27.3	25.9	28.6	29.4
Maternal Mortality Rate	—	0.112	0.06	0.11	0.11	0.38	0.32	0.22	0.28	0.58

Infantile Mortality

Graph showing rate per 1000 live births since 1954



CHIROPODY

There are nine full-time and one part-time directly employed chiropodists in the county. They have surgeries in the various clinics in the county, coring for the elderly and the school child. In addition, the service to the elderly is also given by privote chiropodists on the county's opproved list.

The service is available to persons aged 65 or over, the physically hondicopped, and expectont mathers, in oll coses subject to o medical recommendotion. Treatment can be given in the chirapodist's surgery, and in the case of the housebound in the potient's home.

The following is a summary of the patients treated:

	1970	1971
Number of coses	15.050	16,414
Number of treotments	76,882	80,749

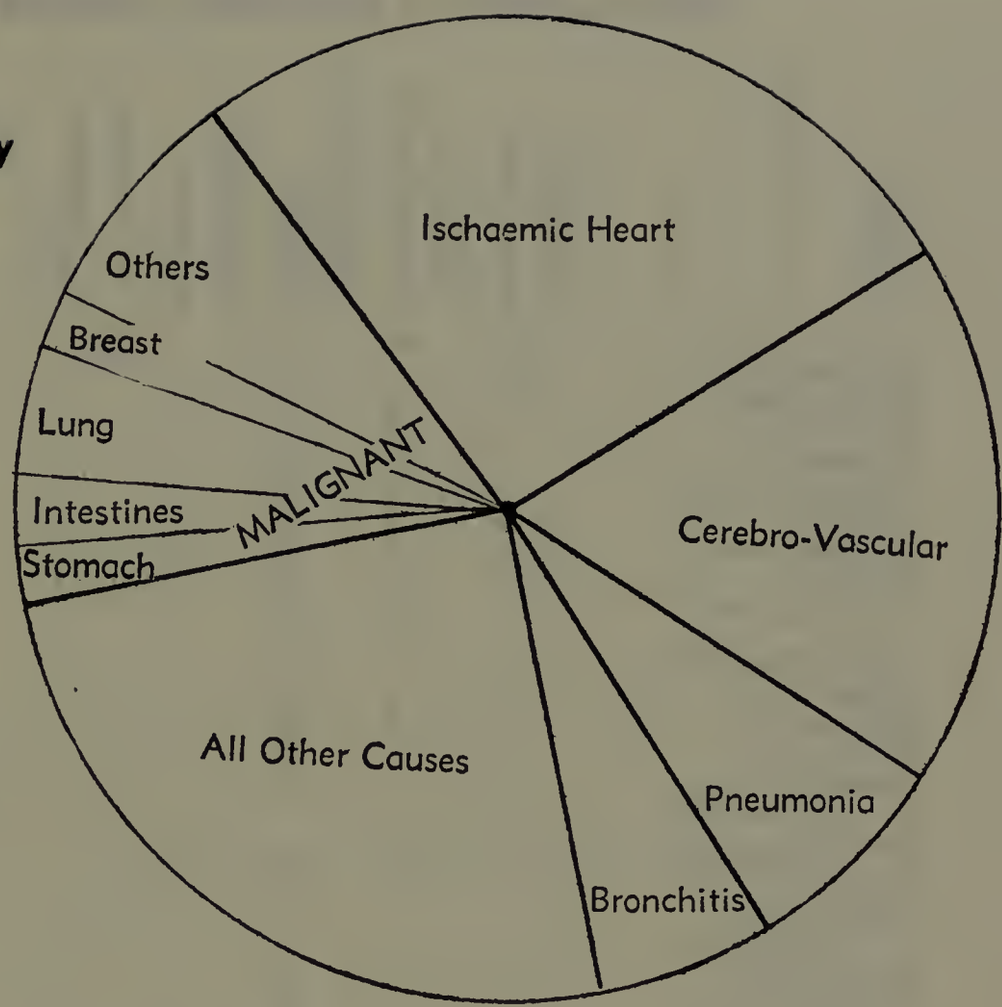
CAUSES OF DEATH

The toble below shows the trend in some importont causes of deoth over the last ten yeors (rote per million populotion):

			1971	1970	1969	1968	1967	1966	1965	1964	1963	1962
B.5 & 6 (1)	Respiratory Tuberculosis		16.1	17.6	22.4	23.7	29.8	25.4	27.9	33.6	34.3	42.4
	Malignont Neoplasm											
B.19.1	Buccal cavity, etc.		39.5	30.6	32.7							
B.19.2	Oesophogus		65.5	63.1	58.0							
B.19.3	Stomach	M	139	166	138	132	133	150	145	150	184	167
		F	90	104	114	126	113	114	136	111	118	121
B.19.4	Intestine	M	167	144	189							
		F	164	165	174							
B.19.5	Lorynx		14.4	12.1	12.1							
B.19.6	Lung, Bronchus											
		M	454	462	404	434	437	397	391	424	398	370
		F	84.4	76.9	78.6	93.7	79.9	89.9	69.7	67.3	61.4	60.4
B.19.7	Breast		222	197	205	178	221	208	207	203	223	200
B.19.8	Uterus		69.1	79.7	73.0	72.3	79.0	77.2	85.0	101	98.9	92.1
B.19.9	Prostote		70.9	82.5	73.0							
B.19.10	Leukaemia		61.9	62.1	64.6	55.9	52.0	46.0	51.0	63.2	62.4	44.5
B.19.11	Others*	M	262	247	275	554	555	517	521	467	530	508
		F	320	302	313	513	530	490	509	453	472	465
B.21	Diabetes		95.2	95.5	88.0	103	71.2	75.2	59.0	82.0	82.2	93.2
B.28	Ischaemic heort	M	1586	1642	1544	1573	1511	1465	1537	1451	1393	1360
		F	1102	1086	1072	1062	907	957	966	898	896	901
B.30	Cerebravascular	M	694	717	683	691	735	760	709	747	783	754
		F	1130	1105	1080	1095	1035	1100	1076	1029	1123	1144
B.31	Influenza		15.3	170	64.6	71.9	62.6	80.1	5.0	16.3	54.1	91.1
B.32	Pneumonia		718	836	773	772	725	655	573	588	729	686
B.33 (1)	Bronchitis		490	524	561	583	591	618	608	572	691	669
B.34	Peptic Ulcer		62.8	66.8	80.5	78.6	82.8	64.5	72.7	64.2	66.6	85.8
B.38	Nephritis, etc.		39.5	44.5	56.1	63.4	45.2	54.7	56.0	65.2	72.9	79.4
BE.47	Motar Accidents		162	141	168	149	170	187	178	163	173	130
BE.48	Other Accidents		122	158	180	151	176	170	153	188	202	199
BE.49	Suicide	M	47.6	46.4	44.9	39.8	41.4	44.0	47.8	52.0	61.4	68.8
		F	28.7	30.1	33.7	30.3	36.6	43.0	36.8	41.0	44.7	51.9

* "Others" before 1969 included buccal cavity, aesophagus, intestine, larynx and prostate, which are given separately from 1969 onwards.

Diagram showing pattern of mortality 1971 (principal causes)



The following table shaws the variation in notifications of some important infectiaus diseases aver the past ten years:

	1971	1970	1969	1968	1967	1966	1965	1964	1963	1962
Measles	2022	6775	1460	7196	7410	16814	9093	9440	11130	4762
Scarlet fever	374	284	314	377	573	929	623	384	345	386
Whooping cough	345	241	60	214	700	317	367	834	522	152
Poliomyelitis	—	—	—	—	1	1	5	2	3	4
Diphtheria	—	—	—	—	—	—	—	—	—	—
Tuberculosis:										
Pulmonary	117	110	114	80	124	135	150	195	172	234
Non-Pulmonary	10	20	20	13	20	15	21	38	21	33

NOTIFICATION OF INFECTIOUS DISEASES 1971

	SCARLET FEVER	WHOOPING COUGH	MEASLES ex. RUBELLA	DYSENTERY	Ac. ENCEPHALITIS INFECTIVE	Ac. ENCEPHALITIS POST-INFECTIVE	TYPHOID FEVER	PARATYPHOID FEVER
Altrincham M.B.	50	40	187	8	—	—	—	—
Bebington M.B.	22	8	15	11	—	—	—	—
Congleton M.B.	10	3	4	—	—	—	—	—
Crewe M.B.	12	33	284	—	—	—	—	—
Dukinfield M.B.	1	17	49	2	—	—	—	—
Ellesmere Port M.B.	1	1	55	—	—	—	—	—
Hyde M.B.	15	5	14	4	—	—	—	—
Macclesfield M.B.	10	1	24	4	—	—	—	—
Sale M.B.	67	57	52	—	—	—	—	—
Stalybridge M.B.	1	26	80	2	—	—	—	—
Alderley Edge U.D.	—	10	4	—	—	—	—	—
Alsager U.D.	—	1	85	—	—	—	—	—
Bollington U.D.	—	3	16	—	—	—	—	—
Bowdon U.D.	4	—	22	—	—	—	—	—
Bredbury & Romiley U.D.	6	5	3	—	—	—	—	—
Cheadle & Gatley U.D.	10	20	48	10	—	—	—	1
Hale U.D.	12	2	81	—	—	—	—	—
Hazel Grove & Bramhall U.D.	5	—	6	—	—	—	—	—
Hoylake U.D.	3	2	6	1	—	—	—	—
Knutsford U.D.	—	—	40	—	—	—	—	—
Langdendale U.D.	3	—	21	—	—	—	—	—
Lymm U.D.	—	4	25	—	—	—	—	—
Marple U.D.	—	—	1	—	—	—	—	—
Middlewich U.D.	1	—	8	—	—	—	—	—
Nantwich U.D.	—	4	46	—	—	—	—	—
Neston U.D.	1	1	1	—	—	—	—	—
Northwich U.D.	15	4	65	—	—	—	—	—
Runcorn U.D.	51	13	105	—	—	—	—	—
Sandbach U.D.	7	3	92	—	—	—	—	—
Wilmslow U.D.	3	4	12	—	—	—	—	—
Winsford U.D.	—	—	7	—	—	—	—	—
Wirral U.D.	2	9	31	—	—	—	—	—
Bucklow R.D.	1	1	9	—	—	—	—	—
Chester R.D.	4	4	33	9	—	—	—	—
Congleton R.D.	15	2	42	—	—	1	1	—
Disley R.D.	—	—	20	—	—	—	—	—
Macclesfield R.D.	1	14	44	—	—	—	—	—
Nantwich R.D.	12	6	59	—	—	—	—	—
Northwich R.D.	16	8	217	—	—	—	—	—
Runcorn R.D.	11	15	74	—	—	—	—	—
Tarvin R.D.	1	19	25	—	—	—	—	—
Tintwistle R.D.	1	—	10	—	—	—	—	—
TOTAL	374	345	2022	51	—	1	1	1

	FOOD POISONING	TUBERCULOSIS RESPIRATORY	TUBERCULOSIS MENINGES & C.N.S.	TUBERCULOSIS OTHER	OPHTHALMIA NEONATORUM	MALARIA	ACUTE MENINGITIS	INFECTIVE JAUNDICE
Altrinchom M.B.	10	4	—	1	—	—	1	2
Bebington M.B.	33	7	—	—	—	—	1	36
Congleton M.B.	1	9	—	—	—	—	—	1
Crewe M.B.	4	9	—	—	—	—	—	—
Dukinfield M.B.	4	3	—	1	—	—	1	3
Ellesmere Port M.B.	—	3	—	1	—	1	—	1
Hyde M.B.	1	7	—	1	—	—	3	—
Macclesfield M.B.	4	21	—	—	—	—	—	1
Sale M.B.	3	6	1	1	—	—	—	4
Stolybridge M.B.	5	1	—	—	1	—	—	44
Alderley Edge U.D.	3	—	—	—	—	—	—	—
Alsager U.D.	—	2	—	—	—	—	—	3
Bollington U.D.	—	—	—	—	—	—	—	—
Bowdon U.D.	2	—	—	—	—	—	—	2
Bredbury & Romiley U.D.	3	4	—	—	—	—	3	3
Cheodle & Gotley U.D.	1	10	—	—	—	—	—	9
Hale U.D.	3	1	—	—	—	1	—	—
Hozel Grove & Bromholl U.D.	—	2	—	—	—	1	—	1
Hoylake U.D.	—	2	—	1	—	—	—	2
Knutsford U.D.	—	—	—	—	—	—	—	—
Longdendale U.D.	1	—	—	—	—	—	1	—
Lymm U.D.	3	2	—	—	—	—	1	—
Marple U.D.	—	2	—	1	—	2	—	9
Middlewich U.D.	—	—	—	—	—	—	—	—
Nontwich U.D.	—	1	—	—	—	—	—	—
Neston U.D.	2	—	—	—	—	—	—	2
Northwich U.D.	—	—	—	—	—	—	—	—
Runcorn U.D.	1	2	—	—	—	—	—	2
Sondbach U.D.	—	1	—	—	—	—	—	4
Wilmslow U.D.	1	3	—	—	—	—	—	2
Winsford U.D.	63	1	—	1	—	—	—	3
Wirrol U.D.	—	1	—	—	—	—	1	1
Bucklow R.D.	2	2	—	—	—	—	—	3
Chester R.D.	3	1	—	—	—	—	—	2
Congleton R.D.	4	1	—	—	—	—	—	13
Disley R.D.	—	—	—	—	—	—	—	—
Macclesfield R.D.	1	2	—	1	—	—	—	1
Nantwich R.D.	1	4	—	—	—	1	1	2
Northwich R.D.	2	2	—	—	—	—	—	1
Runcorn R.D.	1	1	—	—	—	—	—	5
Torvin R.D.	—	—	—	—	—	—	—	—
Tintwistle R.D.	—	—	—	—	—	—	—	—
TOTAL	162	117	1	9	1	6	13	162

There were no coses of diphtheria, poliomyelitis, tetonus, smollpox, or anthrox

COUNTY DISTRICT STATISTICS
1971

TABLE A

Deaths by Causes.—Sex—

Live Births, Stillbirths, Deaths under 1 yr., 4 wks., 1 wk.

Live Birth Rate, Stillbirth Rate, Infantile Mortality, Perinatal Mortality, Death Rate

Population, Area—

- Each County District

TABLE B

Deaths by Causes.—Sex; Age—

- Urban Districts, Rural Districts

	CAUSES OF DEATH	Altrincham M.B.		Bebington M.B.	
		M	F	M	F
B4	Enteritis and other diarrhoeal diseases	—	—	—	—
B5	Tuberculosis of respiratory system	—	—	—	—
B6 (1)	Late effects—pulmonary tuberculosis	—	—	—	—
B6 (2)	Other tuberculosis	—	—	—	—
B11	Meningococcal infection	—	—	—	—
B14	Measles	—	—	—	—
B17	Syphilis and its sequelae	—	—	—	—
B18	Other infective and parasitic diseases	1	—	—	1
B19 (1)	Malignant neoplasm, buccal cavity, etc.	2	—	2	2
B19 (2)	Malignant neoplasm, oesophagus	1	1	2	1
B19 (3)	Malignant neoplasm, stomach	10	6	8	6
B19 (4)	Malignant neoplasm, intestine	4	5	9	14
B19 (5)	Malignant neoplasm, larynx	—	—	—	—
B19 (6)	Malignant neoplasm, lung, bronchus	17	2	36	6
B19 (7)	Malignant neoplasm, breast	—	10	—	16
B19 (8)	Malignant neoplasm, uterus	—	4	—	2
B19 (9)	Malignant neoplasm, prostate	1	—	4	—
B19 (10)	Leukaemia	2	1	3	6
B19 (11)	Other malignant neoplasms, etc.	14	14	22	19
B20	Benign and unspecified neoplasms	—	—	2	1
B21	Diabetes mellitus	—	—	1	5
B22	Avitaminoses	—	—	—	—
B46 (1)	Other endocrine, etc. diseases	—	—	—	—
B23	Anaemias	1	1	1	—
B46 (2)	Other diseases of blood, etc.	—	—	—	1
B46 (3)	Mental disorders	—	—	—	1
B24	Meningitis	—	—	1	2
B46 (4)	Multiple sclerosis	—	1	2	1
B46 (5)	Other diseases of nervous system, etc.	1	1	1	6
B25	Active rheumatic fever	—	—	—	—
B26	Chronic rheumatic heart disease	2	4	5	9
B27	Hypertensive disease	5	4	2	3
B28	Ischaemic heart disease	66	55	94	62
B29	Other forms of heart disease	16	17	8	22
B30	Cerebrovascular disease	16	55	33	61
B46 (6)	Other diseases of circulatory system	6	9	12	12
B31	Influenza	—	—	—	—
B32	Pneumonia	11	8	34	48
B33 (1)	Bronchitis and emphysema	8	6	30	6
B33 (2)	Asthma	—	1	2	2
B46 (7)	Other diseases of respiratory system	—	2	—	2
B34	Peptic ulcer	1	2	2	1
B35	Appendicitis	—	—	1	—
B36	Intestinal obstruction and hernia	—	—	2	2
B37	Cirrhosis of liver	1	—	1	1
B46 (8)	Other diseases of digestive system	2	1	5	3

Congleton M.B.		Crewe M.B.		Dukinfield M.B.		Ellesmere Port M.B.		Hyde M.B.		Macclesfield M.B.		Sale M.B.		Stolybridge M.B.	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	1	—	1	2	—	—	—	1
—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
—	—	—	—	—	—	1	—	—	1	1	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	1	1	—	—	1	1	—
1	1	—	1	—	2	—	1	3	1	1	2	—	—	1	—
—	1	3	2	—	—	2	3	4	—	1	—	2	3	1	—
3	3	14	6	3	1	7	6	3	1	6	5	5	10	3	2
1	6	13	6	3	3	4	7	5	9	4	10	11	8	2	2
—	—	—	—	—	—	—	—	1	—	1	1	1	—	1	—
6	1	24	3	4	1	34	3	21	4	26	1	24	6	8	4
—	3	—	12	1	4	—	11	—	8	—	14	—	7	—	3
—	2	—	9	—	1	—	6	—	2	—	2	—	2	—	2
1	—	6	—	1	—	2	—	5	—	5	—	5	—	3	—
—	—	—	2	1	1	3	—	—	2	1	3	1	—	1	—
5	8	14	13	6	3	14	17	6	21	7	11	7	19	4	13
—	1	—	—	1	1	1	—	1	—	—	3	—	1	—	—
—	1	2	2	—	2	1	—	1	3	1	6	1	2	1	5
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
—	—	—	—	1	1	1	2	—	1	1	1	1	1	—	1
—	—	—	—	—	—	1	—	—	1	—	1	—	3	1	2
—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
—	—	—	1	—	—	—	—	—	—	1	6	—	1	—	—
—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—
1	2	1	—	—	1	—	—	—	—	—	1	—	1	1	—
—	2	3	2	4	—	1	2	5	2	2	3	3	1	2	2
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1	2	7	6	—	1	5	6	1	1	4	3	—	4	1	2
3	1	4	4	4	2	2	—	1	1	10	11	1	6	3	3
25	28	93	46	31	16	85	43	77	52	87	64	99	79	37	24
3	8	16	21	5	14	2	14	18	16	11	17	7	8	7	7
24	28	54	64	16	30	25	22	44	51	41	63	37	45	18	23
4	4	12	12	3	3	2	6	6	7	6	10	14	27	2	8
—	—	4	—	1	1	—	—	—	1	1	—	—	—	—	—
3	8	16	16	11	14	21	17	11	18	11	17	12	13	10	14
9	3	32	12	6	13	18	5	32	10	15	3	12	5	8	2
—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—
1	—	4	4	1	1	1	1	—	3	2	4	1	3	1	1
—	—	2	3	1	2	1	—	1	2	4	—	4	2	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2	1	1	2	1	1	—	1	1	1	—	2	—	2	—	—
1	—	3	—	—	—	2	—	1	—	3	1	1	—	1	—
—	—	4	5	—	—	—	1	3	3	—	5	—	3	—	2

	CAUSES OF DEATH	Altrincham M.B.		Bebington M.B.	
		M	F	M	F
B38	Nephritis and nephrosis	2	1	—	—
B39	Hyperplasia of prostote	—	—	—	—
B46 (9)	Other diseoses, genita-urinory system	—	—	1	1
B41	Other complications of pregnoncy, etc.	—	—	—	—
B46 (10)	Diseases of skin, subcutaneous tissue	—	—	—	—
B46 (11)	Diseases of musculo-skeletal system	2	1	1	3
B42	Congenital anomalies	4	2	3	3
B43	Birth injury, difficult lobour, etc.	—	2	3	2
B44	Other causes of perinotal mortality	1	1	3	—
B45	Symptams and ill-defined conditions	3	10	—	1
BE47	Motor vehicle accidents	5	2	7	2
BE48	All other accidents	1	2	7	4
BE49	Suicide and self-inflicted injuries	3	—	1	2
BE50	All other external couses	1	2	—	1
TOTAL ALL CAUSES		210	233	351	343
LIVE BIRTHS—Totol		334	314	542	496
Legitimote		317	299	521	478
Illegitimote		17	15	21	18
STILLBIRTHS—Total		4	1	5	12
Legitimate		3	1	5	12
Illegitimote		1	—	—	—
DEATHS OF INFANTS—Total (under one year of age)		4	5	11	6
Legitimate		4	5	9	6
Illegitimote		—	—	2	—
DEATHS OF INFANTS—Total (under four weeks of age)		2	3	8	4
Legitimate		2	3	6	4
Illegitimate		—	—	2	—
DEATHS OF INFANTS—Tatal (under one week of age)		2	3	7	3
Legitimate		2	3	6	3
Illegitimate		—	—	1	—
LIVE BIRTHS—Rate per 1,000 populotion		15.8		16.8	
STILLBIRTHS—Rate per 1,000 births, live and still		8		16	
INFANTILE MORTALITY—(Deaths under 1 year) Rate per 1,000 live births ...		14		16	
PERINATAL MORTALITY—(Stillbirths and deaths under 1 week) Rate per 1,000 births, live and still		15		26	
DEATHS ALL AGES—Crude rate per 1,000 population		10.8		11.2	
MID-1971 POPULATION		41.010		61,960	
ACREAGE, 1.4.71		3.477		12,235	

Congleton M.B.		Crewe M.B.		Dukinfield M.B.		Ellesmere Port M.B.		Hyde M.B.		Macclesfield M.B.		Sale M.B.		Stalybridge M.B.	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
—	—	—	1	1	—	—	1	—	1	3	1	3	—	—	—
—	—	2	—	—	—	—	—	—	—	2	—	1	—	—	—
—	1	1	1	—	—	—	4	—	—	2	3	2	5	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
—	1	—	—	—	2	1	—	2	2	—	3	—	—	—	1
—	2	1	2	2	—	4	4	2	2	1	—	3	2	1	—
1	—	3	2	1	—	2	4	—	1	1	—	1	1	5	—
—	—	—	1	—	1	—	1	2	—	2	—	2	1	—	2
2	1	18	25	3	2	1	—	8	16	—	—	—	2	2	8
4	—	6	1	2	—	6	3	—	5	6	2	3	1	3	1
—	—	4	2	2	2	3	2	5	—	5	5	2	3	1	—
2	—	3	1	—	—	2	1	1	—	2	4	8	4	—	1
—	—	—	3	—	—	—	—	1	—	—	1	2	2	—	1
103	119	372	295	116	127	259	196	273	250	280	293	276	284	130	138
159	154	414	390	163	162	663	613	292	322	375	343	469	426	216	216
151	147	380	356	150	148	616	568	265	289	346	319	431	405	200	196
8	7	34	34	13	14	47	45	27	33	29	24	38	21	16	20
4	1	10	9	2	3	6	9	7	3	5	6	6	4	2	1
4	1	10	7	2	3	4	9	7	3	5	6	6	3	2	1
—	—	—	2	—	—	2	—	—	—	—	—	—	1	—	—
2	2	10	8	5	1	14	9	5	3	6	—	4	8	6	2
2	2	8	7	5	1	14	8	3	2	6	—	3	7	5	1
—	—	2	1	—	—	—	1	2	1	—	—	1	1	1	1
2	—	5	4	3	1	6	6	4	2	3	—	4	4	5	2
2	—	5	3	3	1	6	5	3	2	3	—	3	4	5	1
—	—	—	1	—	—	—	1	1	—	—	—	1	—	—	1
1	—	5	4	1	1	4	6	4	2	3	—	4	2	5	1
1	—	5	3	1	1	4	5	3	2	3	—	3	2	5	—
—	—	—	1	—	—	—	1	1	—	—	—	1	—	—	1
15.4		15.7		18.5		20.6		16.4		16.3		15.8		18.9	
16		23		15		12		16		15		11		7	
13		22		18		18		13		8		13		19	
19		34		21		19		26		19		18		21	
10.9		13		13.8		7.4		13.9		13.0		9.9		11.7	
20.370		51,250		17,590		61,830		37,520		44,030		56,560		22,860	
5,587		4,389		1,725		9,477		4,170		4,787		3,629		3,190	

	CAUSES OF DEATH	Alderley Edge U.D.		Alsager U.D.		Bollington U.D.		Bawdon U.D.		Bredbury and Ramiley U.D.	
		M	F	M	F	M	F	M	F	M	F
B3	Bacillary dysentery, amoebiasis	—	—	—	—	—	—	—	—	—	—
B4	Enteritis and other diorrhoeal diseases	—	—	—	—	—	—	—	—	—	—
B5	Tuberculasis af respiratory system	—	—	—	—	—	—	—	—	—	3
B6 (1)	Late effects, respiratory	—	—	1	—	—	—	—	—	—	—
B6 (2)	Other tuberculasis	—	—	—	—	—	—	—	—	—	—
B9	Whooping Cough	—	—	—	—	—	—	—	—	—	1
B11	Meningococcol infectian	—	—	—	—	—	—	—	—	—	1
B14	Measles	—	—	—	—	—	—	—	—	—	—
B18	Other infective and parasitic diseases	—	1	—	—	—	—	—	—	—	—
B19 (1)	Malignant neoplasm, buccal cavity, etc.	—	1	1	—	1	—	1	—	—	1
B19 (2)	Malignant neoplasm, oesophagus	—	—	—	—	—	—	—	—	1	—
B19 (3)	Malignant neoplasm, stomach	1	—	1	2	2	—	—	—	1	1
B19 (4)	Malignant neoplasm, intestine	1	—	1	—	2	1	2	—	5	6
B19 (5)	Malignant neoplasm, larynx ...	—	—	—	—	—	—	—	—	1	—
B19 (6)	Malignant neaplosm, lung, bronchus	1	—	4	1	2	—	3	—	14	1
B19 (7)	Malignant neoplasm, breast ...	—	—	—	3	—	4	—	1	—	5
B19 (8)	Malignant neaplasm, uterus ...	—	—	—	—	—	—	—	—	—	2
B19 (9)	Malignant neoplasm, prostate	—	—	—	—	—	—	—	—	—	—
B19 (10)	Leukaemia	—	1	—	—	—	—	1	1	1	2
B19 (11)	Other malignant neaplasms, etc.	2	4	1	2	5	2	1	3	6	9
B20	Benign and unspecified neoplasms	—	—	—	—	—	—	—	—	—	—
B21	Diabetes mellitus	1	1	—	—	—	2	—	—	—	1
B22	Avitaminoses, etc.	—	—	—	—	—	—	—	—	—	—
B46 (1)	Other endocrine, etc. diseases	—	—	—	—	—	—	—	—	—	2
B23	Anaemias	—	1	—	—	—	—	—	1	—	—
B46 (2)	Other diseases of blood, etc. ...	—	—	—	—	—	—	—	—	—	—
B46 (3)	Mental disorders	—	—	—	—	—	—	—	—	—	—
B24	Meningitis	—	—	—	—	—	—	—	—	—	—
B46 (4)	Multiple sclerasis	—	—	—	—	—	—	—	1	—	—
B46 (5)	Other diseases af nervous system, etc.	—	—	—	—	—	—	—	1	1	—
B26	Chronic rheumatic heart disease	—	—	—	—	—	—	1	1	2	3
B27	Hypertensive disease	—	—	—	1	—	—	—	—	2	2
B28	Ischaemic heart disease	8	16	7	5	16	8	6	17	43	32
B29	Other forms af heart disease ...	1	2	3	2	1	1	2	4	4	4
B30	Cerebrovascular disease	2	8	9	6	3	6	4	9	23	32
B46 (6)	Other diseases of circulatary system	2	2	1	2	1	1	1	6	5	6
B31	Influenza	—	—	—	—	—	—	—	—	—	—
B32	Pneumonio	1	3	1	—	5	—	1	3	7	15
B33 (1)	Bronchitis and emphysema ...	1	—	—	—	4	2	2	1	6	2
B33 (2)	Asthma	—	—	—	—	—	—	—	1	—	—
B46 (7)	Other diseases of respiratory system	—	—	—	—	1	1	—	2	2	1
B34	Peptic ulcer	—	—	—	1	1	—	—	—	3	—
B35	Appendicitis	—	—	—	—	—	—	—	—	—	—
B36	Intestinal obstruction ond hernia	1	—	—	—	1	—	—	1	1	—
B37	Cirrhosis af liver	—	—	—	—	1	—	1	—	—	—
B46 (8)	Other diseases of digestive system	—	—	—	1	—	—	—	1	4	2

Cheadle and Gatley U.D.		Hale U.D.		Hazel Grove and Bramhall U.D.		Hoyloke U.D.		Knutsford U.D.		Longdendale U.D.		Lymm U.D.		Marple U.D.		Middlewich U.D.		Nantwich U.D.		Neston U.D.		Northwich U.D.		Runcorn U.D.		Sandbach U.D.		Wilmslow U.D.		Winsford U.D.		Wirral U.D.	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	2	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1
1	1	—	—	—	2	2	—	—	—	—	—	—	1	—	—	—	—	—	2	—	—	2	—	1	1	—	—	—	—	—	1	—	—
1	3	—	1	—	1	1	3	—	1	—	—	—	—	—	—	1	—	1	—	—	—	2	2	1	1	2	—	1	2	—	—	—	2
8	4	4	2	1	3	2	4	1	1	—	—	—	1	4	4	3	—	4	2	1	—	6	2	8	2	2	1	3	3	3	1	—	5
6	12	4	5	8	8	4	7	3	1	2	2	2	2	3	5	2	—	6	1	5	2	4	3	7	6	2	1	6	4	3	1	3	6
1	—	—	—	1	—	1	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	1	—	—	—	1	1	—	—	—	—
28	4	8	1	10	7	19	4	7	2	4	—	4	1	5	—	2	—	1	1	7	—	15	4	15	4	3	1	13	6	9	1	13	7
—	15	—	3	—	7	—	6	—	5	—	3	—	3	—	3	—	2	—	3	—	2	—	4	—	7	—	2	—	5	—	5	—	5
—	6	—	1	—	2	—	3	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	1	—	—	—	1	—	3	—	1	—	—
—	—	—	—	2	—	3	—	1	—	1	—	1	—	2	—	—	—	—	—	2	—	1	—	3	—	—	—	1	—	3	—	1	—
2	—	1	—	—	3	1	1	1	—	—	—	—	—	1	—	—	—	1	1	—	1	1	—	3	1	—	—	3	—	—	—	—	4
18	18	6	4	8	6	6	18	6	5	3	3	3	2	11	11	—	2	3	1	4	5	5	8	9	11	2	2	8	8	4	5	9	12
—	—	—	—	2	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	1	—	1	1	—	—	1	—	—	1	—
1	2	—	1	—	3	1	1	—	—	1	—	—	1	—	1	1	—	—	1	—	1	1	2	1	4	—	1	1	—	—	2	2	2
—	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
1	—	—	—	—	1	—	1	1	2	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	1	1	—	—	1	2	—	2	2
1	—	1	—	—	—	—	1	—	—	—	1	—	—	1	—	—	—	—	1	1	—	—	2	—	—	—	—	—	—	—	1	—	1
—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	1
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1	—	—
1	—	—	2	—	1	—	1	—	1	—	—	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
3	—	—	1	1	3	3	2	—	3	—	—	—	1	1	1	—	—	—	2	—	4	—	—	2	1	—	—	1	1	—	—	1	—
2	4	—	1	1	1	2	3	1	1	—	—	—	1	1	3	1	—	—	—	1	—	1	2	3	2	—	—	—	4	—	1	1	2
1	8	3	3	1	2	2	4	—	1	—	1	1	1	2	3	—	1	—	2	—	1	1	1	4	4	—	1	1	3	2	1	1	4
88	57	32	23	61	30	59	61	26	15	12	9	12	13	36	22	16	12	17	7	31	16	37	24	60	40	19	9	42	40	27	10	48	39
7	10	3	15	4	5	12	8	3	3	4	3	6	3	5	4	3	1	7	7	2	11	4	11	1	8	5	4	3	3	10	9	6	11
38	63	6	14	20	26	12	57	10	35	5	10	3	4	19	22	8	9	11	23	9	17	20	21	20	29	19	24	21	25	15	31	15	31
9	14	3	2	7	14	10	17	2	5	1	1	1	—	1	10	—	—	—	1	3	6	11	9	8	14	2	2	4	8	3	7	7	3
—	—	—	—	1	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—
9	23	1	3	4	12	9	18	4	2	5	8	1	3	9	9	—	2	6	11	7	12	6	4	7	13	6	6	5	6	6	5	9	14
16	8	2	2	8	1	10	6	6	1	2	1	5	1	12	2	7	—	10	2	3	4	6	3	16	5	6	1	11	1	5	4	6	2
—	—	1	—	1	—	—	—	—	1	—	—	—	1	—	—	—	1	—	—	—	—	—	1	—	1	—	1	1	1	—	—	—	—
2	3	—	4	1	1	2	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	3	2	3	—	1	—	1	4	3	2	—	—
1	—	—	—	1	1	2	3	—	1	2	—	—	—	2	—	—	1	1	—	2	—	—	1	—	—	—	1	—	1	—	—	—	1
—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
2	1	—	—	—	3	2	1	—	—	—	—	1	—	—	1	—	—	—	—	—	—	—	—	1	—	1	1	—	1	1	1	—	1
—	—	1	—	—	—	1	1	—	—	—	—	—	—	1	1	—	2	—	—	2	1	1	—	1	—	1	—	—	1	—	—	—	—
1	5	2	1	1	4	—	4	1	1	1	—	1	1	1	1	—	—	1	1	1	—	—	—	2	3	1	—	1	—	—	3	2	4

	CAUSES OF DEATH	Alderley Edge U.D.		Alsager U.D.		Bollington U.D.		Bowdon U.D.		Bredbury and Romiley U.D.		Cheadle and Gatley U.D.		Hole U.D.		Hazel Grove and Bramhall U.D.		Hoyleke U.D.		Knutsford U.D.		Longdendale U.D.		Lymm U.D.		Morple U.D.		Middlewich U.D.	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
B38	Nephritis and nephrasis	1	—	1	—	—	—	—	—	—	—	3	4	1	—	1	—	2	1	—	1	—	—	—	—	—	1	—	—
B39	Hyperplasia of prostate	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
B46 (9)	Other diseases, genito-urinary system	—	1	—	—	—	—	—	—	—	1	1	1	1	1	4	4	2	2	1	2	1	—	—	2	1	2	—	—
B46 (10)	Diseases of skin, subcutaneous tissue	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	1	1	—	—
B46 (11)	Diseases of muscula-skeletal system	—	—	—	—	—	—	—	—	—	4	1	2	—	1	—	4	—	1	—	—	—	—	—	1	—	4	—	1
B41	Other complications, pregnancy	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B42	Congenital anomalies	—	—	—	—	—	—	1	1	—	2	3	5	1	—	1	1	—	—	—	1	—	1	—	—	2	2	—	—
B43	Birth injury, difficult labour, etc.	—	—	—	—	—	—	1	—	2	3	—	—	1	—	1	—	1	—	1	—	1	1	—	—	—	—	—	—
B44	Other causes of perinatal martality	—	—	—	—	—	—	—	—	2	—	2	1	—	—	1	1	—	1	1	—	—	—	2	—	—	1	—	1
B45	Symptams and ill-defined conditions	—	—	2	—	—	—	1	2	—	2	1	2	—	1	2	3	2	—	1	1	—	—	—	—	1	1	4	1
BE47	Matar vehicle accidents	1	—	1	—	—	—	2	—	3	3	6	4	1	—	2	2	1	2	1	2	1	2	2	1	6	—	1	—
BE48	All other accidents	1	—	1	1	—	—	—	—	1	2	1	—	—	1	2	2	4	1	1	—	—	—	4	2	1	1	—	—
BE49	Suicide and self-inflicted injuries	—	—	1	—	—	1	—	—	2	—	1	2	3	1	1	3	3	2	1	—	1	—	—	—	1	—	1	—
BE50	All ather external causes	—	—	2	—	—	—	—	—	—	—	—	1	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ALL CAUSES		25	41	38	27	46	29	31	57	143	151	268	289	86	98	160	168	185	246	83	94	48	46	49	48	131	118	50	37
LIVE BIRTHS—Tatal		26	23	70	71	64	41	24	20	278	270	573	477	109	85	351	300	182	177	112	102	63	66	112	112	174	187	60	73
Legitimate		25	21	66	67	62	36	24	20	266	256	549	165	104	81	347	286	172	171	106	94	57	58	109	112	168	178	58	69
Illegitimate		1	2	4	4	2	5	—	—	12	14	24	12	5	4	4	14	10	6	6	8	6	8	3	—	6	9	2	4
STILLBIRTHS—Tatal		—	—	1	1	2	—	—	—	3	2	2	3	—	1	1	4	2	2	—	—	—	2	—	1	6	2	—	4
Legitimate		—	—	1	1	2	—	—	—	3	2	2	3	—	1	1	4	2	2	—	—	—	2	—	1	6	2	—	4
Illegitimate		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
DEATHS OF INFANTS—Total ..... (under one year af age)		1	1	1	—	1	—	2	1	4	5	4	6	2	—	3	2	1	1	3	1	2	3	2	—	2	1	—	1
Legitimate		—	1	—	—	1	—	1	1	4	5	4	6	2	—	3	2	1	1	3	1	1	3	2	—	2	1	—	1
Illegitimate		1	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
DEATHS OF INFANTS—Total ..... (under faur weeks af age)		1	1	1	—	—	—	1	—	4	3	3	2	2	—	3	1	1	1	3	1	1	2	1	—	1	1	—	1
Legitimate		—	1	—	—	—	—	1	—	4	3	3	2	2	—	3	1	1	1	3	1	1	2	1	—	1	1	—	1
Illegitimate		1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
DEATHS OF INFANTS—Total ..... (under one week af age)		1	—	1	—	—	—	1	—	4	3	3	2	1	—	3	1	1	1	2	1	1	2	1	—	—	1	—	1
Legitimate		—	—	—	—	—	—	1	—	4	3	3	2	1	—	3	1	1	1	2	1	1	2	1	—	—	1	—	1
Illegitimate		1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
LIVE BIRTHS—Rate per 1,000 papulation		10.9		13.2		15.9		8.9		19.2		17.2		11.3		16.3		10.9		15.5		12.4		21.2		15.6		17.0	
STILLBIRTHS—Rate per 1,000 tatal births		—		14		19		—		9		5		5		8		11		—		15		4		22		29	
INFANTILE MORTALITY—(Deaths under 1 year) Rate per 1,000 live births		41		7		10		68		16		10		10		8		6		19		39		9		8		8	
PERINATAL MORTALITY — (Stillbirths and deaths under 1 week) Rate per 1,000 total births		20		21		19		23		22		9		10		14		17		14		38		9		24		36	
DEATHS ALL AGES — Rate per 1,000 papulation		14.6		6.1		11.3		17.7		10.3		9.1		10.8		8.2		13.1		12.8		9.1		9.2		10.7		11.1	
MID-1971 POPULATION		4,510		10,650		6,620		4,970		28,590		61,170		17,110		39,870		32,950		13.840		10,370		10.580		23,210		7,830	
ACREAGE, 1.4.71		742		2,243		1,442		1,090		4,290		5,299		2,264		5,990		6,055		2,485		2,545		4,241		24,040		7.960	

Nantwich U.D.		Neston U.D.		Northwich U.D.		Runcorn U.D.		Sandbach U.D.		Wilmslow U.D.		Winsford U.D.		Wirral U.D.	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
—	—	—	1	2	1	—	1	—	—	1	1	—	—	—	—
—	—	—	—	—	—	1	—	—	—	—	—	1	—	1	—
—	1	—	—	—	1	—	1	—	—	—	—	1	1	—	—
—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—
—	4	—	1	1	3	—	1	1	—	1	1	—	3	—	1
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2	—	—	1	3	—	2	—	—	—	1	—	2	3	1	3
1	—	—	—	1	1	1	4	—	—	—	1	4	1	3	—
—	—	—	1	—	—	2	—	1	—	—	1	5	2	1	1
1	1	—	—	1	4	—	—	2	3	1	1	3	1	—	—
—	—	3	3	2	—	6	1	1	—	2	1	4	—	1	2
2	—	1	—	3	1	—	3	1	—	—	2	3	3	—	2
1	—	—	—	1	—	2	1	—	—	1	2	—	—	1	1
—	1	1	—	—	1	—	2	—	1	1	2	—	1	—	—
77	78	87	94	143	121	192	176	81	63	137	146	119	110	136	171
83	60	153	166	140	133	422	374	138	121	225	197	322	335	185	187
81	56	149	161	129	122	388	338	135	118	186	174	306	307	176	184
2	4	4	5	11	11	34	36	3	3	39	23	16	28	9	3
1	—	1	—	1	2	3	5	4	—	2	3	6	6	3	3
1	—	1	—	1	2	3	5	4	—	2	3	6	5	3	1
—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	2
4	—	—	2	5	4	7	7	5	—	3	3	13	10	5	3
4	—	—	2	5	4	7	6	5	—	3	3	13	10	3	3
—	—	—	—	—	—	—	1	—	—	—	—	—	—	2	—
3	—	—	—	2	1	5	4	2	—	1	2	11	6	4	3
3	—	—	—	2	1	5	4	2	—	1	2	11	6	2	3
—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—
3	—	—	—	1	1	5	3	2	—	1	2	10	4	4	3
3	—	—	—	1	1	5	3	2	—	1	2	10	4	2	3
—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—
12.5		18.5		15.0		21.9		19.5		14.4		26.4		13.7	
7		3		11		10		15		12		18		16	
28		6		33		18		19		14		35		22	
28		3		18		20		23		19		39		34	
13.5		10.5		14.5		10.1		10.8		9.6		9.2		11.3	
11,480		17,250		18,190		36,340		13,290		29,330		24,840		27,110	
1,179		8,495		2,636		8,045		3,716		7,691		7,094		5,801	

	CAUSES OF DEATH	Bucklow R.D.		Chester R.D.	
		M	F	M	F
B3	Bocillary dysentery, amoebiasis	—	—	—	—
B4	Enteritis ond other diarrhoeal diseases	—	—	—	—
B5	Tuberculosis of respirotory system	—	—	—	—
B6 (1)	Late effects respirotory tuberculosis	—	1	—	—
B6 (2)	Other tuberculosis	—	—	—	—
B14	Meosles	—	—	—	—
B17	Syphilis ond its sequelae	—	—	—	—
B18	Other infective and parasitic diseases	—	—	1	—
B19 (1)	Molignant neoplasm, buccol covity, etc.	—	—	—	—
B19 (2)	Malignont neoplosm, oesophagus	1	—	2	5
B19 (3)	Malignont neoplosm, stomoch	—	1	7	—
B19 (4)	Molignant neoplasm, intestine	6	1	10	5
B19 (5)	Molignant neoplosm, lorynx	1	—	—	—
B19 (6)	Molignont neoplosm, lung, bronchus	5	—	18	4
B19 (7)	Molignant neoplosm, breost	—	4	—	8
B19 (8)	Molignant neoplosm, uterus	—	—	—	3
B19 (9)	Molignont neoplosm, prostote	3	—	1	—
B19 (10)	Leukoemia	—	—	1	—
B19 (11)	Other malignont neoplasms, etc.	3	5	15	10
B20	Benign and unspecified neoplosms	—	—	1	1
B21	Diobetes mellitus	1	1	2	2
B22	Avitominoses	—	—	—	—
B23	Anoemias	—	—	—	2
B46 (1)	Other endocrine, etc. diseoses	—	2	—	1
B46 (2)	Other diseases of the blood, etc.	—	—	—	—
B46 (3)	Mental disorders	—	—	—	—
B24	Meningitis	—	—	—	—
B46 (4)	Multiple sclerosis	—	—	—	—
B46 (5)	Other diseases of nervous system, etc.	1	5	2	3
B26	Chronic rheumatic heart diseose	1	—	—	5
B27	Hypertensive diseose	2	1	3	5
B28	Ischoemic heort diseose	18	22	48	27
B29	Other forms of heort diseose	4	2	5	18
B30	Cerebrovoscular diseose	10	11	23	47
B46 (6)	Other diseases of circulatory system	5	6	3	12
B31	Influenza	—	—	—	1
B32	Pneumonio	1	1	33	49
B33 (1)	Bronchitis and emphysema	3	1	19	3
B33 (2)	Asthma	—	—	—	—
B46 (7)	Other diseases of respiratory system	—	1	—	3
B34	Peptic ulcer	2	—	1	—
B35	Appendicitis	—	1	—	—
B36	Intestinol obstruction and hernia	1	1	1	—
B37	Cirrhosis of liver	—	—	—	—
B46 (8)	Other diseases of digestive system	—	3	1	3

TABLE A—Rural Districts (1)

Congleton R.D.		Disley R.D.		Macclesfield R.D.		Nantwich R.D.		Northwich R.D.		Runcorn R.D.		Tarvin R.D.		Tintwistle R.D.	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	1	1	1	—	1	—	—	—	—
—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	1	—	—	1	—	1	1	1	—	—	—	—	—
—	—	—	—	1	—	1	—	—	—	1	1	1	—	—	—
—	1	—	—	2	1	—	1	2	2	—	1	1	—	—	—
1	—	2	—	3	2	9	3	8	5	6	3	2	2	—	—
6	2	—	2	5	5	5	5	4	6	7	10	6	4	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
6	1	2	1	13	3	13	1	26	2	25	3	10	2	—	1
—	6	—	—	—	5	—	10	—	14	—	13	—	4	—	1
—	3	—	1	—	5	—	1	—	3	—	6	—	1	—	—
2	—	—	—	5	—	6	—	1	—	7	—	—	—	—	—
—	—	—	—	1	2	2	—	1	—	2	2	—	—	—	—
12	6	—	3	6	11	6	12	13	14	13	12	5	4	—	—
—	—	—	—	—	—	—	—	2	1	—	1	—	—	—	—
1	2	—	1	5	2	4	2	2	1	2	6	—	2	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	1	—	—	—	—	1	1	—	—	—	1	—	1	—	—
—	1	—	—	—	—	—	1	—	1	1	2	—	—	—	—
—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
—	—	—	—	—	3	—	—	—	1	—	—	—	1	—	—
—	1	—	—	—	—	1	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—
3	2	—	—	1	2	2	2	—	1	2	1	1	—	—	—
2	1	—	—	2	1	4	2	—	2	4	5	1	1	—	—
—	1	—	—	—	—	3	3	2	4	5	4	1	3	—	—
23	20	6	3	46	28	52	29	69	59	76	52	26	10	5	3
4	6	1	—	6	8	12	16	11	13	14	17	6	6	—	1
23	51	3	5	9	34	28	39	32	53	33	56	11	16	1	3
5	1	1	2	3	6	7	6	12	17	12	18	4	2	1	1
—	—	—	—	—	2	—	—	1	—	—	—	—	—	—	—
6	6	—	—	13	11	8	8	11	10	16	14	11	7	—	1
7	2	1	1	10	2	15	2	17	5	20	5	4	—	—	1
—	1	—	—	—	—	1	—	1	1	—	1	—	—	—	—
1	1	1	—	2	1	—	—	2	2	3	1	—	—	—	—
1	1	—	—	—	—	1	—	3	1	2	1	2	1	—	—
—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	1	—	—	1	1	1	—	1	—	1	2	—	—	1	—
—	—	—	—	1	2	2	—	—	1	1	—	—	2	—	—
1	2	—	—	—	1	3	2	5	1	1	2	1	1	—	—

	CAUSES OF DEATH	Bucklow R.D.		Chester R.D.	
		M	F	M	F
B38	Nephritis and nephrosis	1	—	1	—
B39	Hyperplasio of prostote	—	—	—	—
B46 (9)	Other diseoses, genito-urinory system	1	—	3	4
B46 (10)	Diseases of skin, subcutaneous tissue	—	—	1	—
B41	Other complications of pregnancy	—	—	—	—
B46 (11)	Diseases of musculo-skeletal system	—	2	2	2
B42	Congenital anomalies	—	—	1	1
B43	Birth injury, difficult lobour, etc.	—	—	—	3
B44	Other causes of perinatal mortolity	—	—	—	2
B45	Symptoms and ill-defined conditions	—	—	2	1
BE47	Motor vehicle accidents	2	2	6	—
BE48	All other accidents	1	1	2	4
BE49	Suicide and self-inflicted injuries	1	—	1	1
BE50	All other externol causes	—	—	—	1
TOTAL ALL CAUSES		74	75	216	236
LIVE BIRTHS—Total		185	163	271	280
Legitimote		169	147	251	270
Illegitimate		16	16	20	10
STILLBIRTHS—Total		3	3	3	3
Legitimate		3	3	3	3
Illegitimote		—	—	—	—
DEATHS OF INFANTS—Total (under one year of age)		—	—	2	6
Legitimate		—	—	2	4
Illegitimate		—	—	—	2
DEATHS OF INFANTS—Total (under 4 weeks of age)		—	—	1	5
Legitimate		—	—	1	4
Illegitimate		—	—	—	1
DEATHS OF INFANTS—Total (under one week of age)		—	—	1	4
Legitimote		—	—	1	3
Illegitimote		—	—	—	1
LIVE BIRTHS—Rate per 1,000 population			17.0		15.9
STILLBIRTHS—Rate per 1,000 births, live and still			17		11
INFANTILE MORTALITY—(Deaths under 1 year) Rate per 1,000 live births ...			—		15
PERINATAL MORTALITY—(Stillbirths and deaths under 1 week) Rate per 1,000 total births			17		20
DEATHS ALL AGES—Rate per 1,000 population			7.3		13.0
MID-1971 POPULATION		20,430		34,650	
ACREAGE, 1.4.71		45,103		43,491	

Congleton R.D.		Disley R.D.		Mocclesfield R.D.		Nontwich R.D.		Northwich R.D.		Runcorn R.D.		Tarvin R.D.		Tintwistle R.D.	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1	—	—	—	1	1	—	—	1	—	1	—	—	—	—	—
1	—	—	—	—	—	2	—	1	—	2	—	—	—	—	—
1	—	—	—	5	2	—	2	—	1	—	—	—	1	—	—
—	—	—	—	—	—	—	1	—	1	—	1	—	1	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	1	—	—	—	3	—	1	1	—	—	1	—	1	—	—
1	—	1	—	—	3	1	2	2	3	2	3	—	—	—	—
1	—	—	—	1	—	1	1	4	3	3	—	2	—	—	—
—	1	—	—	—	—	1	3	7	—	1	3	—	1	—	—
4	8	—	—	—	2	4	8	5	8	2	2	—	1	—	1
3	1	—	—	6	3	5	2	4	1	12	1	3	—	—	—
2	1	—	—	4	1	5	3	2	1	4	5	2	1	—	—
2	—	—	—	2	1	1	—	1	1	1	2	1	1	—	—
—	—	—	—	—	1	1	1	—	1	—	—	1	1	—	—
120	134	18	20	155	155	210	173	257	243	284	259	102	78	9	13
160	156	29	15	190	181	290	258	391	345	342	343	155	129	13	14
156	152	28	15	182	176	280	255	372	319	321	319	151	121	12	13
4	4	1	—	8	5	10	3	19	26	21	24	4	8	1	1
2	1	—	—	2	2	6	3	4	4	3	4	1	—	—	—
2	1	—	—	2	2	6	3	4	3	3	4	1	—	—	—
—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—
2	2	1	—	1	2	4	6	14	8	8	7	2	1	—	—
2	2	1	—	1	1	4	6	13	8	6	6	2	—	—	—
—	—	—	—	—	1	—	—	1	—	2	1	—	1	—	—
2	2	—	—	1	1	4	5	11	5	7	5	2	1	—	—
2	2	—	—	1	1	4	5	10	5	6	4	2	—	—	—
—	—	—	—	—	—	—	—	1	—	1	1	—	1	—	—
1	1	—	—	1	1	3	5	11	2	6	5	2	1	—	—
1	1	—	—	1	1	3	5	10	2	5	4	2	—	—	—
—	—	—	—	—	—	—	—	1	—	1	1	—	1	—	—
16.4		11.1		13.2		15.9		16.9		15.5		15.5		18.4	
9		—		11		16		11		10		4		—	
13		23		8		18		30		22		11		—	
16		—		16		31		28		26		14		—	
13.2		9.6		11.0		11.1		11.5		12.2		9.8		15.0	
19,270		3,960		28,060		34,490		43.450		44,330		18,370		1,470	
38,666		2,208		72,583		100,869		57,014		40,663		62,591		1,490	

AGGREGATE IN URBAN DISTRICTS

	CAUSE OF DEATH	Sex	All Ages	Under 4 weeks	4 weeks and under 1 year	1-4	5-14	15-24	25-34	AGE IN 35-44
B3	Bacillary dysentery, amaebiasis ...	M	—	—	—	—	—	—	—	—
		F	—	—	—	—	—	—	—	—
B4	Enteritis and other diarrhaeal diseases	M	4	1	3	—	—	—	—	—
		F	5	—	1	1	—	—	1	—
B5	Tuberculosis of respiratory system ...	M	4	—	—	—	—	—	—	—
		F	7	—	—	—	—	—	—	1
B6 (1)	Late effects of respiratory tuberculosis	M	3	—	—	—	—	—	—	—
		F	1	—	—	—	—	—	—	—
B6 (2)	Other tuberculosis	M	—	—	—	—	—	—	—	—
		F	1	—	—	—	—	—	—	—
B9	Whooping Cough	M	—	—	—	—	—	—	—	—
		F	1	—	1	—	—	—	—	—
B11	Meningococcal infection	M	2	—	—	—	—	1	1	—
		F	3	—	1	—	—	—	1	—
B14	Measles	M	—	—	—	—	—	—	—	—
		F	—	—	—	—	—	—	—	—
B17	Syphilis and its sequelae	M	—	—	—	—	—	—	—	—
		F	1	—	—	—	—	—	—	—
B18	Other infective and parasitic diseases	M	3	—	—	—	1	—	—	—
		F	8	2	1	—	—	—	—	1
B19 (1)	Malignant neoplasm, buccal cavity, etc.	M	19	—	—	—	—	—	—	2
		F	20	—	—	—	—	—	—	2
B19 (2)	Malignant neoplasm, oesophagus ...	M	27	—	—	—	—	—	—	—
		F	27	—	—	—	—	—	—	—
B19 (3)	Malignant neoplasm, stomach ...	M	117	—	—	—	—	—	—	3
		F	84	—	—	—	—	—	—	2
B19 (4)	Malignant neoplasm, intestine ...	M	137	—	—	—	—	2	1	5
		F	143	—	—	—	—	—	—	5
B19 (5)	Malignant neoplasm, larynx ...	M	12	—	—	—	—	—	—	—
		F	2	—	—	—	—	—	—	—
B19 (6)	Malignant neoplasm, lung, bronchus...	M	387	—	—	—	—	—	3	8
		F	76	—	—	—	—	—	—	3
B19 (7)	Malignant neoplasm, breast ...	M	1	—	—	—	—	—	—	—
		F	181	—	—	—	—	—	2	16
B19 (8)	Malignant neoplasm, uterus	F	54	—	—	—	—	—	1	5
B19 (9)	Malignant neoplasm, prostate ...	M	54	—	—	—	—	—	—	—
B19 (10)	Leukaemia	M	28	—	—	1	2	5	3	—
		F	30	—	—	1	1	—	—	3
B19 (11)	Other malignant neoplasms ...	M	219	—	—	1	2	9	6	10
		F	279	—	—	1	1	2	5	9
B20	Benign and unspecified neoplasms ...	M	10	—	—	—	—	—	—	—
		F	13	—	—	—	1	2	—	—
B21	Diabetes mellitus	M	18	—	1	—	—	—	—	—
		F	52	—	—	—	1	—	—	—
B22	Avitaminoses, etc.	M	1	—	—	—	—	—	—	1
		F	3	—	—	—	—	—	—	—
B46 (1)	Other endocrine, etc. diseases ...	M	13	1	3	1	—	1	—	—
		F	17	—	—	1	—	—	1	1
B23	Anaemias	M	8	—	—	—	—	—	—	—
		F	17	—	—	—	—	—	—	—
B46 (2)	Other diseases of blood, etc. ...	M	3	—	—	—	—	1	—	1
		F	2	—	—	—	—	—	—	1
B46 (3)	Mental disorders	M	2	—	—	—	—	—	—	—
		F	12	—	—	—	—	1	—	—
B24	Meningitis	M	3	—	1	1	—	1	—	—
		F	4	1	—	—	1	—	—	—
B46 (4)	Multiple sclerosis	M	6	—	—	—	—	—	—	1
		F	15	—	—	—	—	—	—	—
B46 (5)	Other diseases of nervous system ...	M	35	—	—	1	3	2	1	2
		F	41	—	—	—	1	—	—	2

YEARS 45-54	55-64	65-74	75 and over	AGGREGATE IN RURAL DISTRICTS: All Ages	Under 4 weeks	4 weeks and under 1 year	AGE IN YEARS 1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75 and over
—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—
—	—	—	2	3	—	1	—	—	—	—	—	—	—	1	1
1	1	2	—	2	—	—	—	—	—	—	—	—	—	1	1
1	1	4	—	—	—	—	—	—	—	—	—	—	—	—	—
—	2	1	—	—	—	—	—	—	—	—	—	—	—	—	—
1	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	1	—	1	—	—	—	—	—	—	—	1	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—
—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	2	—	—	4	1	1	—	—	1	—	—	—	—	—	1
2	—	1	1	2	—	—	—	—	—	—	—	—	—	1	1
2	2	8	5	4	—	—	—	—	—	—	—	—	2	—	2
2	3	3	10	1	—	—	—	—	—	—	—	—	—	—	1
1	9	12	5	8	—	—	—	—	—	—	—	—	4	2	2
1	7	7	12	11	—	—	—	—	—	—	—	—	1	2	8
7	26	46	35	38	—	—	—	—	—	—	—	3	14	10	11
6	16	28	32	16	—	—	—	—	—	—	—	—	2	2	12
11	37	43	38	49	—	—	—	—	—	—	—	7	10	17	15
5	37	48	48	40	—	—	—	—	—	—	—	4	3	16	17
2	4	4	2	2	—	—	—	—	—	—	—	—	—	2	—
—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—
45	129	140	62	118	—	—	—	—	—	—	2	10	32	55	19
10	19	24	20	18	—	—	—	—	—	—	1	1	6	4	6
—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—
40	40	48	35	65	—	—	—	—	—	—	2	9	20	11	23
9	8	16	15	23	—	—	—	—	—	—	1	4	9	4	5
—	6	15	33	25	—	—	—	—	—	—	—	1	1	7	16
2	5	5	5	7	—	—	—	1	—	—	—	—	2	—	4
7	2	8	8	4	—	—	—	1	—	—	—	—	—	2	1
32	62	51	46	73	—	—	—	2	1	—	4	6	17	26	17
34	64	82	81	77	—	—	1	1	1	2	3	5	19	23	22
2	2	—	6	3	—	—	—	1	—	—	—	—	—	2	—
2	—	4	4	3	—	—	—	—	—	—	1	—	1	—	1
—	3	7	7	17	—	—	—	—	—	—	—	2	4	7	4
2	3	17	29	19	—	—	—	—	—	—	—	—	3	7	9
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	1	—	2	—	—	—	—	—	—	—	—	—	—	—	—
—	3	2	2	1	—	1	—	—	—	—	—	—	—	—	—
—	3	6	5	8	1	—	1	—	1	—	—	—	1	3	1
—	—	1	7	1	—	—	—	—	—	—	—	—	—	1	—
1	1	6	9	6	—	—	—	—	—	1	—	1	1	1	2
—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	1	1	—	—	—	—	—	—	—	—	1	—	—
1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
1	3	2	5	5	—	—	—	—	—	—	2	—	—	1	2
—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—
—	—	1	1	1	1	—	—	—	—	—	—	—	—	—	—
2	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—
4	7	4	—	1	—	—	—	—	—	—	—	—	1	—	—
—	4	13	9	12	—	—	—	—	2	2	1	—	1	6	—
1	3	14	20	16	—	—	—	—	2	1	1	2	2	2	6

			All Ages	Under 4 weeks	4 weeks and under 1 year	1-4	5-14	15-24	25-34	35-44
										AGE IN
B26	Chronic rheumatic heart disease ...	M	43	—	—	—	—	—	1	1
		F	67	—	—	—	—	—	2	4
B27	Hypertensive disease	M	56	—	—	—	—	—	1	—
		F	79	—	—	—	—	—	—	1
B28	Ischaemic heart disease	M	1397	—	—	—	—	1	5	41
		F	974	—	—	—	—	—	3	1
B29	Other forms of heart disease ...	M	189	—	—	—	—	1	2	3
		F	273	—	—	—	—	1	—	1
B30	Cerebrovascular disease	M	600	—	—	—	—	1	3	3
		F	944	—	—	—	—	2	4	11
B46 (6)	Other diseases af circulatory system ...	M	149	1	—	—	—	—	2	4
		F	228	—	—	—	—	1	—	2
B31	Influenza	M	10	—	1	—	—	—	—	—
		F	3	—	—	—	—	—	—	—
B32	Pneumonia	M	249	4	13	1	2	3	—	2
		F	345	1	7	—	2	3	1	3
B33 (1)	Bronchitis and emphysema ...	M	314	—	1	—	—	—	—	—
		F	114	—	3	—	—	—	2	—
B33 (2)	Asthmo	M	5	—	—	—	—	1	—	—
		F	13	—	—	1	—	—	2	1
B46 (7)	Other diseases af respiratory system ...	M	30	—	4	2	1	—	—	3
		F	43	—	7	—	—	—	—	2
B34	Peptic ulcer	M	31	—	—	—	—	1	—	—
		F	23	—	—	—	—	—	—	—
B35	Appendicitis	M	2	—	1	—	—	—	—	—
		F	1	—	—	—	—	—	—	—
B36	Intestinal obstructian and hernia ...	M	18	3	—	—	1	—	—	1
		F	23	—	—	—	—	—	—	—
B37	Cirrhasis af liver	M	24	—	—	—	—	—	—	1
		F	8	—	—	—	—	—	—	—
B46 (8)	Other diseases af digestive system ...	M	34	1	1	—	—	1	1	1
		F	55	—	—	—	—	—	—	3
B38	Nephritis and nephrosis	M	21	—	—	—	—	1	1	—
		F	16	—	1	—	—	—	—	1
B39	Hyperplosia of prostote	M	10	—	—	—	—	—	—	—
B46 (9)	Other diseases af genito-urinary system	M	18	—	—	—	—	—	1	—
		F	35	1	—	—	—	—	1	1
B46 (10)	Diseases af skin, subcutaneous tissue ...	M	2	—	—	—	—	—	—	—
		F	4	—	1	—	—	—	—	—
B46 (11)	Diseases of muscula-skeletal system ...	M	10	—	—	—	—	—	—	—
		F	45	—	—	—	—	1	1	—
B42	Cangenital anomalies	M	40	17	7	6	3	1	1	1
		F	37	11	14	4	3	—	—	—
B43	Birth injury, difficult labour, etc. ...	M	35	35	—	—	—	—	—	—
		F	23	23	—	—	—	—	—	—
B44	Other causes af perinatal martality ...	M	27	26	1	—	—	—	—	—
		F	17	16	1	—	—	—	—	—
B45	Symptams and ill-defined conditions ...	M	59	2	2	—	—	—	—	—
		F	88	—	—	—	—	—	—	—
BE47	Motor vehicle accidents	M	89	—	—	2	4	29	9	10
		F	40	—	—	—	3	4	2	1
BE48	All other accidents	M	56	1	6	5	6	4	5	7
		F	41	—	2	2	1	1	1	3
BE49	Suicide and self-inflicted injuries ...	M	43	—	—	—	—	2	10	7
		F	26	—	—	—	—	2	5	1
BE50	All other external causes	M	8	—	—	—	—	3	1	1
		F	22	—	—	—	—	4	—	3
TOTAL ALL CAUSES		M	4685	92	45	21	25	71	58	119
		F	4686	55	40	11	15	24	35	90

YEARS 45-54	55-64	65-74	75 and over	AGGREGATE IN RURAL DISTRICTS: All Ages	Under 4 weeks	4 weeks and under 1 year	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75 and over
							AGE IN YEARS								
5	18	11	7	14	—	—	—	—	—	—	—	4	2	3	5
7	11	29	14	17	—	—	—	—	—	—	—	—	4	3	10
3	11	17	24	16	—	—	—	—	—	—	—	—	3	6	7
2	11	25	40	21	—	—	—	—	—	—	—	—	2	9	10
147	369	479	355	369	—	—	—	—	—	1	5	33	79	128	123
33	107	283	547	253	—	—	—	—	—	—	—	8	22	89	134
4	17	62	100	63	—	—	—	—	—	—	1	2	8	20	32
3	17	54	197	87	—	1	—	—	—	1	1	4	2	17	61
17	75	196	305	173	—	—	—	—	—	—	2	8	20	60	83
22	50	209	646	315	—	—	—	1	—	2	2	4	27	74	205
9	14	42	77	53	—	—	—	—	—	—	—	2	11	16	24
4	14	30	177	71	—	—	—	—	—	—	—	1	4	7	59
—	—	6	3	1	—	—	—	—	—	—	—	—	—	1	—
—	—	2	1	3	—	—	—	—	—	—	—	—	1	2	—
5	34	63	122	99	1	—	—	1	1	1	1	2	8	26	58
3	19	49	257	107	1	—	—	—	—	1	1	1	3	22	78
15	59	135	104	96	—	—	—	—	—	—	1	2	20	33	40
4	19	26	60	22	—	—	—	—	—	—	1	1	2	6	12
—	1	2	1	2	—	—	—	—	—	1	—	—	1	—	—
1	2	5	1	3	—	—	—	—	—	1	1	—	—	—	1
2	5	10	3	9	—	—	—	—	—	—	—	2	1	1	5
2	2	8	22	9	1	1	—	—	—	1	1	—	—	1	4
2	7	8	13	12	—	—	—	—	—	—	—	1	3	4	4
—	3	10	10	4	—	—	—	—	—	—	—	—	1	2	1
—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
1	—	—	—	2	—	—	—	—	—	—	—	—	1	—	1
1	4	3	5	7	—	—	—	—	—	—	—	2	2	1	2
2	3	5	13	5	—	—	—	—	—	—	—	—	—	2	3
3	12	5	3	4	—	—	—	—	—	—	1	—	1	1	1
2	2	1	3	5	—	—	—	—	—	1	—	2	1	1	—
3	11	8	7	12	—	—	—	—	—	—	2	1	3	1	5
1	9	13	29	15	—	—	—	—	—	—	1	1	1	3	9
2	3	6	8	6	—	—	—	—	—	—	—	1	1	—	4
—	1	5	8	1	—	—	—	—	—	—	—	—	—	1	—
—	—	4	6	6	—	—	—	—	—	—	—	1	—	3	2
1	3	2	11	10	—	—	—	—	—	—	—	—	1	3	6
—	2	11	19	10	—	—	—	—	—	—	—	—	1	3	6
—	1	—	1	1	—	—	—	—	—	—	—	—	1	—	—
—	—	1	2	4	—	—	—	—	—	—	—	—	—	2	2
—	2	4	4	3	—	—	—	—	—	—	—	—	1	2	—
2	2	9	30	11	—	—	—	—	—	—	—	—	2	4	5
1	3	—	—	8	5	2	—	—	1	—	—	—	—	—	—
2	1	2	—	12	3	4	1	1	—	1	—	—	—	—	2
—	—	—	—	12	11	1	—	—	—	—	—	—	—	—	—
—	—	—	—	7	7	—	—	—	—	—	—	—	—	—	—
—	—	—	—	9	9	—	—	—	—	—	—	—	—	—	—
—	—	—	—	10	10	—	—	—	—	—	—	—	—	—	—
1	—	11	43	17	—	—	—	—	—	—	—	—	1	1	15
1	—	1	86	31	—	—	—	—	—	—	—	—	—	2	29
9	10	7	9	41	—	—	2	3	13	3	4	4	4	4	4
1	4	9	16	10	—	—	2	2	1	—	—	—	2	1	2
5	4	6	7	22	—	—	2	1	3	2	1	4	3	2	4
1	3	5	22	17	—	—	4	—	—	—	—	—	1	4	8
5	6	10	3	10	—	—	—	—	1	1	1	—	5	1	1
6	3	8	1	6	—	—	—	—	—	—	1	3	—	2	—
2	—	1	—	2	—	—	—	—	1	1	—	—	—	—	—
6	3	3	3	5	—	—	—	—	1	—	—	—	1	2	1
350	968	1451	1485	1445	28	6	4	10	24	12	26	98	266	453	518
236	507	1128	2545	1386	24	8	9	6	6	12	20	52	149	339	761

CHESHIRE COUNTY COUNCIL

CHILD AND SCHOOL HEALTH 1971

INTRODUCTION

Mr. Chairman, Lodies ond Gentlemen,

I present herewith my annual report on the school health service for the year 1971, which reflects the work corried out during thot colendar year.

During the yeor administrative fusion took place between the sections dealing with the heolth of the pre-school ond the schoolchild, thus forming o comprehensive sectian of community poediatrics. The orrongements for developmental examination of oll pre-school children at regulor intervals, in order to detect defects ond obnormolities as early as possible, were completed. The scheme become computer-managed for children born on or after 1st Jonuory 1972—the computer will remind field stoff of children due for appropriate appointments, ond will record coded diagnoses. Stotistics, by geographicol district, can be mode ovoiloble for educotion, social services and health deportment purposes. The school health service will thus have o firmer faundation far its odvisory functions to schools.

Responsibility for the doy core of the pre-school child (day nurseries, child minders and playgroups) passed to the social services department, as did the care of the unsupported mather and child. My thonks ore due to staff transferred to the sociol services deportment for their devotion and loyolty while with this department. The junior training centres were transferred to the education deportment from the heolth department; the health of children attending will be the concern af the school health service, and the whole resources of the latter will be ovoiloble to them.

The illegitimate births survey was completed during the year, as a result of which impartant lessons were leornt. Though the total of illegitimate births has follen os campared with the previous year, those accurring to girls under the oge of 18 years doubled during the same period. There has been o marked fall in the numbers adopted, which indicates a greater occeptance of the problem—parents and grandparents are more willing ta accept the burden.

The problem of drug obuse has received o greot deol of ottention by the department this year. A drug lioison cammittee for West Cheshire has been formed, and two members of the health department serve an it. During the year this department held o drug study day attended by deportmentol medical officers, medical afficers attached to teacher troining colleges, and social workers. The aim af the conference wos to ensure that when cases ar suspected cases did arise, all ovailable resources were brought to beor on them.

The genetic counselling clinic has fulfilled a very useful role, not only in counselling fomilies, but also in helping departmentol medical afficers ond general practitioners with this problem. It is haped that we can look forward to o similar service based on Liverpool University for the western part of the county.

The work of speech therapists, teachers af the deaf and audio-vision testers has continued to moke a valuoble contributian to the work of the service.

In special educotianal provision we note with pleasure the opening of Cloughwood residential speciol school for maladjusted boys and the rapid increase in special classes in ordinary schools catering for the educotionally subnormol, the maladjusted ond thase with hearing impairment.

The problem of the physically handicapped hos been greotly complicated by the large number of children suffering from spina bifido who are now surviving through a great part of school life os o result of new surgicol techniques. This has necessitoted moking exceptional provision within ordinary schools in the short term as well as an increase in special school provision in the long term.

Among the notable feotures of the dentol work this yeor have been first the welcome increose in productivity and secondly the close link with the Professor of Preventive Dentistry ot Monchester University in orgonising research programmes. Fluaride rinses and the seoling of the biting surface of posterior teeth ore examples of studies in progress.

In the fields of ear, nose ond throat work and ophthalmolagy, the greater involvement of clinicol consultants in prevention work is welcomed.

The public heolth section of the deportment cantinued ta ploy an important part in the school heolth service. The revision of the code of proctice regarding kitchen hygiene wos referred to in the 1970 report. This year the section hos been concerned in plons for introducing, at first on on experimentol bosis, pre-cooked frozen foods. Use of micrawave cooking ond its dangers were also the subject of o study. A code of proctice for hygiene in swimming pools wos also published during the year by the department.

The statistics all show that the periodic inspections are down, but that special inspections are up. This is to be expected and reflects the new trend for fallow-up of hondicapped pupils and special coses to toke precedence over routine procedures. Figures indicate the eorlier detection of defects of sight ond hearing, probobly becouse the oudio-vision testing service is naw well estoblished. The number of coses of scabies ond impetigo are up, and the scobies problem has been the subject of a national publication; the committee is well oware of the problem ond the steps being token. There ore indicotions of the increased use being made af speech theropy and also of child guidance—in the latter service the increasing part ployed by psychologists when cansultant psychiatric opinion is not strictly necessary is canfirmed.

My thanks ore due to the various contributors to this report—porticularly Dr. I. Cheshom, Mr. J. B. Dowell (dentol), Dr. A. Holmes-Smith (ophthalmic) and Mr. W. Pembletan (environmentol).

I wish olso to express my appreciation of the ca-operation and help received from the director of educotion and his administrative stoff and from head teochers and their stoffs. I should olso like to thank the chairmon ond members of the education committee, and particulorly of the special services sub-committee far the help and support they have given at oll times.

B. G. GRETTON-WATSON,

June 1972. Principal School Medical Officer.

CHILD AND SCHOOL HEALTH

The division between child and school health services has always been an artificial one from a clinicol point of view. This division may once have had some administrative advantage, but this no longer exists, and the benefits of a medically unified child, school and youth service are overwhelmingly opparent todoy.

Accordingly, with the approvol of the respective committees involved, the decision was taken during 1971 to unify the two sections, and to devolve doy to day responsibility for medical monagement onto the divisional medical officers. Policy for services remains, of course, a central responsibility.

The benefits of this unification—for the community receiving services, and for those wha contribute their skills to these services—will be apparent in the description of the computer-monoged child health scheme which follows.

During the year, further senior clinical medical officers were appointed for each health division (their proper title is senior medical officer in department); these medical officers will take increasing responsibility for clinical standards and practice within their division, for appraisal of children with handicaps that may require special educational management, and for liaison at a clinical level with their equivalent colleagues in the education and social services departments.

CLINICS—DEVELOPMENTAL PAEDIATRIC EXAMINATIONS

The Working Party set up towards the end of 1970 to examine the organisation and function of the child health clinics in the county agreed on three important developments:

1. The former child welfare clinics should be completely replaced by child health clinics practising developmental techniques of examination; the advisory function of these former clinics should continue separately as health visitor advice clinics.
2. In order to attempt to include o much higher proportion of the child population than has been achieved so far, and so that accurate evaluation of results could be obtained, it was agreed thot the scheme should be computer-managed and recorded. Much thought was given to the need to balance the sometimes differing demands of computer and clinical functions. The scheme evolved for Cheshire—which is scheduled to run from 1st Jonuary 1972 for three years—is considered to be a highly satisfactory compromise, allowing considerable freedom for clinical services within a divisional framework, whilst at the some time enobling comprehensive computer recording, reminder ond evaluating systems to be effected. Success, however, will rest eventually on the skills of individual practitioners, and on the co-operotion of the community.
3. In anticipation of o larger demand for this service, so as to use the (sometimes under-valued) skills of health visitors, it was decided that the new scheme should involve both health visitors and doctors directly in developmental paediatric sessions.

The new programme of developmental paediatric examinations, starting on 1st January 1972, for children barn on or after that dote, will include examinotions by health visitors and doctors alternately at 6 weeks, 6 months, 9 months, 2 years, 3 yeors and 4½ years (the last being also the pre-school medical exominotion).

Though there will be no computer link between the child health scheme and the computer-managed immunisation scheme, the information to commence both records will be taken from a redesigned birth notification record. Any notification of changes to a child's record will be implemented outomatically for both schemes.

For each child for whom a computer record is created in this way (from the statutory birth notification record), the computer will send out to divisional offices forms consisting of name, address, and type of examination due—a month in advance for all routine developmental examinotions, and for all "special recalls" more than a month in advance, together with one

addressed postcard. It will be the responsibility of the divisional office or clinic to complete the postcard with the name of the clinic, time and date of appointment.

Following the examination, the results will be recorded by code on the computer, together with details of additional examinations required. Special recalls of this kind will be scheduled at the requested time by the computer. If results are not returned for computer storage, the computer will issue a reminder (by "defaulter list" to health visitors) that no result has been received. The computer will also record additional valuable information, such as the presence of an educational handicap that may require special educational management referral of a case to the social services department, etc. We hope the computer system will help to improve notification in both these important spheres.

New clinic record forms have been devised, with the co-operation of senior medical officers in department.

Children born before 1st January 1972 will not be included in the computer arrangements, but their examination will be "phased-in" to the new scheme, local arrangements being made for this.

The computer immunisation scheme will continue separately, as previously.

In order to plan for the envisaged expansion of services, two further postgraduate courses of training for clinic doctors (general practitioners, sessional and local authority medical officers) were organised during the autumn of 1971, in association with the Universities of Manchester and Liverpool. The courses were increased in time to six days; the "Manchester" course was again held at the Gatley Health Centre, the "Liverpool" course being held at Eastham clinic instead of at Clatterbridge Hospital. In all, 6 courses have now been organised in the county since 1968.

We are indebted to Professor John Davies and Professor John Hay of Manchester and Liverpool University Departments of Child Health respectively, who together with their colleagues—in particular Professor Holzell and Dr. Rosenbloam—have contributed so much to the organisation of these courses.

Since the courses commenced in 1968, some 140 doctors (general practitioners and local authority personnel) have attended. We have been glad to include a small number of doctors from neighbouring authorities who have shown interest in the Cheshire scheme and have asked permission to attend these courses of training.

It is envisaged that developmental paediatric examinations will take place in some 121 clinics in the county in 1972. In special circumstances, health visitors and/or doctors may carry out examinations in the patients' homes. The possibility of providing mobile clinics for rural areas is being explored.

In addition to the training courses for doctors, intensive training of health visitors for their new role was carried out throughout the latter half of the year; checks on the success of this training were carried out at the close of the year by senior medical officers, in the divisions and from Pepper House. We consider that this additional intensive training should not only qualify health visitors for their specific role in the new developmental paediatric scheme, but should also enhance their abilities as advisers to the family on child development.

COUNTY DAY NURSERIES

On 31st March 1971, administrative responsibility for day nurseries was handed over to the newly formed social services department. At that time, 13 day nurseries were in operation, one new nursery was nearing completion at Partington, and a further nursery at Hattersley was well advanced in its planning stages. The health department continues to advise on any relevant medical matter.

REGISTERED NURSERIES, PLAYGROUPS AND CHILD MINDERS

As with day nurseries the responsibility for these premises was handed over to the social services department on 31st March 1971. At that time, 530 registrations were operative.

CARE OF THE UNSUPPORTED MOTHER

This responsibility, in the main, has also passed to the social services department; the health department continues to request and scrutinise all medical reports relating to patients requesting admission to the Cheshire mother and baby home. The demand for places in the Home continued to fall during the first three months of the year, and at the time of handover, only 7 patients were in residence.

ILLEGITIMATE BIRTH SURVEY

This survey commenced in 1968 and the following table indicates the nature of the enquiry.

ILLEGITIMATE BIRTHS 1968-71—SUMMARY

	Children born in			
Result of First Investigation	**1968**	**1969**	**1970**	**1971**
Living with mother	80	108	97	61
Living with mother and putative father	98	61	63	50
Living with mother and grandparents	292	306	260	282
Adopted	222	115	105	79
Taken into care of local authority	10	6	5	2
Stillborn	6	2	2	1
Died	4	8	10	5
Left county council area	21	14	15	5
Total	733	620	557	485
No. included in total where mother aged 18 or under	21	41	93	174

It is important to notice that whereas the total number of illegitimate births appears to show a decline from 733 in 1968 to 485 in 1971, the number born to mothers aged 18 years and under has nearly doubled each year—21 in 1968, 41 in 1969, 93 in 1970, 174 in 1971.

The number of "stable" (even if not legitimate) unions in 1971 is reported as 120; of unstable unions as 359. Though the number of children put forward for adoption has decreased (from 222 in 1968 to 79 in 1971), this decrease may be only apparent—children may be put forward for adoption at an older age. In any case, non-adoption may not necessarily indicate a satisfactory home background for the child, bearing in mind the incidence of the reported "instability" of union.

PHENYLKETONURIA (AND OTHER METABOLIC DISEASES) SCREENING

As described previously, phenylketonuria is a hereditary disease in which the metabolism of phenylalanine is abnormal. The incidence varies between 1 : 10,000 to 1 : 20,000 births. Untreated, infants with this disorder develop mental retardation, usually of a severe degree. If the disorder can be detected early, a phenylalanine-free diet will control the manifestations of the disorder.

The Liverpool Regional Hospital Board has provided facilities for detecting this disorder since 1970, by means of the Guthrie Test, blood specimens being taken by county midwives at 7th—10th day of life. In 1971, 5,436 samples were tested in this way, with chromatography for other metabolic disorders being carried out on some.

The Manchester Regional Hospital Board decided to carry out Scriver testing, health visitors being trained, with the help of Dr. Komrower and Dr. Sardharwalla, to obtain samples for testing at the 10th—14th day of life.

Two positive cases of PKU disorder were detected during the year, one in the Liverpool and one in the Manchester RHB area.

DRUGS STUDY DAY

A one-doy course wos orgonised for senior medicol officers ond divisionol medical officers in the county, in the autumn of 1971. Representotives of generol proctitioner services were invited to ottend, ond olso those of the Educotion ond Sociol Services Deportments. Drug misuse, especiolly by the young, is o motter of serious concern to doctors, educotionolists, ond sociol services personnel, os well os to the police; its control must depend on o wider oppreciotion, not only of the multi-foctoriol couses but olso of the grove inherent dongers for some of those who experiment with drug obuse. Not enough is yet known of the long-term effects of some of the drugs of misuse, nor of the foctors which leod some people on to escolotion of misuse, either of the so-colled "soft" drugs, or with those norcotic preporotions including heroin ond morphio which couse physicol addiction, ond often premature deoth.

DRUG LIAISON COMMITTEE—WEST CHESHIRE

This Committee wos set up during the yeor, its Chairmon being o consultont psychiotrist involved in the treotment of drug oddiction. Two representotives of the Heolth Deportment ore members of this Committee.

GENETIC COUNSELLING CLINIC

This clinic continues to serve its excellent purpose of providing informotion to parents on the likelihood of genetic diseose in their offspring. The clinics hove been held ot Mocclesfield, ond this moy occount in port for the smoll numbers of coses referred during the yeor, the number being opproximotely the some os in the previous yeor. The toble following illustrotes the types of disorder which hove been referred to Dr. Horris, the consultont for the Genetic Counselling Clinic.

Genetic Counselling Clinic 1971

Hore lip + cleft polote	2
Meningocele + hydrocephalus	1
Anencepholy	3
Hydrocepholus	2
Spino bifido occulto	1
Myelomeningocele + hydrocepholus	2
Imperforote ouditory meotus + genito-urinory obnormolities	1
Gross congenitol heort defect	1
Grossly obnormol stillbirth	1
Family history of Huntington's choreo	1
Fibrocystic diseose of the poncreos	1
Fomily history of deofness	2
Benign broin tumour + tuberous sclerosis	1
Congenitol biloterol lomellar catorocts	1
Syndactylism	1
	21

SELECTIVE SCHOOL MEDICAL INSPECTION

This is now followed throughout the county. In essence, it involves o thorough medicol exominotion of oll children oged 4½ yeors, in the term before entry to school (in future, this exominotion will become the sixth developmentol exominotion in o child's life, os well os its first school exomination). Thereofter, children ore seen if selected, either becouse of on observed defect, or ot the request of teochers, nurses ond porents, or as the result of routine exominotions, revealing defects, by audiovision testers, nurses, etc.

The system allows for good clinical standards to be maintained, and also allows opportunity for discussion and co-operation between school doctors and teachers. It appears satisfactory in principle.

Sufficient clinic nurses have been trained this year to fulfil their role in the secondary schools.

AUDIOVISION TESTERS

The establishment of these was filled during the year; though their work is sometimes carried out under difficult circumstances, they provide a service which appears to be highly satisfactory.

PERIPATETIC TEACHERS OF HEARING IMPAIRED CHILDREN

In addition to their previous duties which have been described before, these teachers have been involved in the periodic review of children placed in residential and day special schools for hearing impairment. This review is particularly valuable in the first few years that a child is placed in a special school, and again as the child approaches the school leaving stage.

SPEECH THERAPY SERVICE

Two further senior speech therapists were appointed during the year. The three senior therapists are each responsible for the speech therapists within one-third of the county, and provide guidance and support to new entrants.

Various efforts were made, with the co-operation of the Education Department (particularly the divisional education officers) to provide intensive treatment to children with severe speech disorders. There is evidence that intense therapy of this kind (daily, for one-two weeks) is more beneficial than prolonged intermittent therapy, especially where the speech disorder is severe, or where the home is unable to co-operate in treatment.

Discussions were held with the director of education's staff on the need for special classes for severe speech disorders, where education and treatment could be combined. Severe speech disorders, particularly where these are associated with language delay, and are likely to contribute to educational difficulties and retardation of educational progress.

SPECIAL EDUCATION PROVISION

1. **Mentally handicapped children**

   The responsibility for the education of these children was transferred from the health to the education department in April 1971. The transfer was effected without difficulty and to the satisfaction of staff in both departments.

   The anomaly of separating one group of handicaps from others had finally disappeared; in time the full benefits of the application of educational skills to these children must become apparent. A great deal has yet to be learned about the needs of these handicapped children and their families, and the health department was glad to participate in the meetings of the working party set up by the director of education to examine these needs in detail.

2. **Maladjusted children**

   Cloughwood, the residential school for maladjusted boys, started to receive pupils during the year. A psychiatric social worker was attached on a sessional basis, and next year a consultant child psychiatrist will provide services at the school.

3. **Children with communication disorders**

   The Neston unit for children with communication disorders, including those with features of the autistic syndrome, commenced in 1969. Part of its function—perhaps the most important part—is to provide a diagnosis and assessment of the child's assets and liabilities. This function is carried out by an initial appraisal, with a short attendance at the unit, of a child who has been referred either by a psychiatrist, psychologist, or

school medical officer; subsequently a period of 3-6 months of observation and assessment may be required. Thereafter, continued attendance at the unit or a more suitable placement is agreed.

Of the 15 children admitted so far, every one had a severe language disorder; the majority presented emotional or behaviour problems in addition, usually of a severe degree. These latter problems appear to respond more quickly to effective educational management than the problem of communication, and the learning difficulties associated with or stemming from this disorder.

Such a unit requires a high staff ratio and a multi-disciplinary approach if it is to be successful. A senior speech therapist spends three sessions a week at the school and a consultant psychiatrist visits regularly. A senior medical officer in department is involved. The psychologist and social worker are essential.

The authority is fortunate to have a head teacher who is able to use this team effectively and happily.

Parental interaction is most important, and active measures are taken to ensure this.

The unit is designed to cater for children aged 5-12 years, though preferably it should be able, as it has done from time to time, to admit pre-school children.

An evaluation of the success of a unit such as this would need to take account of the criteria of success. The Department of Education and Science are conducting an evaluation of the success of 5 such units set up by the I.L.E.A., and we await this information with interest.

4. **Torpenhow School**

The structure of the building allows little change to be made in function. Children are now admitted for one academic year as a minimum whenever possible, and children are permitted to return home at weekends, where this is agreed to be in their interest. Parents may visit the school every weekend, and at other times by request. The school accommodates 50 children.

The categories of disorders admitted to the school include asthma, bronchitis, congenital heart defects and other conditions requiring medical or medico-ancillary attention, as well as children who are in general poor health, or present behaviour disorders not requiring placement in a school for maladjusted children.

5. **Grappenhall Hall School**

This school has 100 places for educationally subnormal boys, generally within the IQ range of 55-75, aged 8-16 years, who suffer from difficulties such as poor environment, maladjustment or an additional physical or sensory handicap.

The progress of the boys is kept under constant review and those who prove to be unsuitable are excluded. At the other end of the scale a watch is constantly kept for the boy who makes exceptionally good progress which may justify his re-entry to an ordinary school. As a result of this constant review, there is an indication that the majority of boys remaining at the school to the age of 16 years will be able to take up employment.

The school was fully occupied all year, during which there were 16 new admissions taking the places of children discharged.

One of the county speech therapists made visits to the school during the year to help pupils with speech defects, and one of the senior peripatetic teachers of the deaf also made regular visits.

The school dental surgeon visited regularly and carried out any treatment necessary.

6. **Capenhurst Grange School**

There are 75 places for girls at this school, which accepts the same type of child as, and operates in a similar way to, the Grappenhall Hall School. These places were occupied in 1971 when there were 21 new admissions replacing children discharged.

7. **Special classes attached to ordinary schools**

The continued rapid growth in provision of these special educational facilities for educationally subnormal, for hearing impaired, and for maladjusted children is very welcome.

8. **Physically handicapped children**

The number of these continues to remain high, partly due to the successful surgical treatment of myelomeningocele. Pictor House School provides facilities for children within daily travelling distance.

The building of the new school proposed at Winsford should commence early in 1972; the plans for this school have been fully discussed by health and education staff. Provision for hearing impaired physically handicapped children has been made.

Discussions were held on the need for a further school for physically handicapped children, possibly in the Upton, Chester, area.

Nursery nurse assistance was made available at certain primary schools which admitted two or three physically handicapped children.

RUBELLA

A further survey of the rubella status of teachers and other personnel closely involved in work with young children was carried out with the assistance of the Manchester Public Health Laboratory Service and the divisional medical officers in the county.

COUNTY DENTAL SERVICE

(by T. B. Dowell, Chief Dental Officer)

MOTHERS AND YOUNG CHILDREN

There has been a further increase in the demand for treatment for pre-school children, continuing the trend over recent years. However, only a minority of those requiring treatment are in fact receiving it, and it appears that the demand is limited by the resources available rather than by the unwillingness of parents to seek treatment.

Dental auxiliaries who are trained to carry out simple fillings and other routine treatment under the direction of a dental officer are especially suited to dealing with this age group. There are now three of these girls in post, and they are making a great contribution by introducing young children to routine dentistry in a tactful and sympathetic manner.

The New Zealand dental service introduced ancillary workers of a similar type more than 50 years ago, and the benefit of their widespread use has been demonstrated conclusively. It is disappointing that the British dental profession as a whole has not seen the advantages of such a scheme, and there is still considerable resistance to proposals to provide additional training facilities. Any realistic plan for the comprehensive dental care of young children will have to rely on increased numbers of auxiliaries.

The decision to support a policy of fluoridation of the water supplies is encouraging although the policy is blocked in many areas by the decisions of other authorities. Pre-school children will be the first to benefit from fluoridation of the deficient supplies, and it is hoped that implementation of the first schemes will be carried out as quickly as possible.

There has also been an increase in the number of expectant and nursing mothers treated. This group is entitled to free treatment under the general dental services and it is usually preferable to encourage them to attend a general dental practitioner who can continue to treat them after their special entitlement is ended. However, there are certain areas in the county, particularly the areas catering for overspill population from Liverpool and Manchester, where there is a marked shortage of dentists, and provision for mothers has to be made by the county council's services.

There is a high degree of co-operation with the executive council regarding health centres, resulting in the provision of general medical services for the new population. It is disappointing that corresponding arrangements have not been possible for the general dental service, and the dental surgeries at Castlefields remain unused.

SCHOOL CHILDREN

The dental service has continued to develop along the lines discussed in previous reports. The whole-time equivalent of dental officers in post, although still well below the establishment, has increased by three. However, the shortage of dentists and the difficulties of recruitment continue to be the main obstacles to the provision of a comprehensive service.

Under these circumstances it is important that the available manpower is used as efficiently and effectively as possible. It is pleasing to be able to report a further increase in productivity during the year, which together with the additional staff has resulted in 7,000 more school children being treated than in 1970, an increase of 23%. The total number of attendances at the clinics has increased by 27% and the number of fillings by 24%.

The practice of dentistry in the public service is based on responsibility for a population or group of children as opposed to general dental practice where the responsibility is to individual patients who seek treatment. It is important that new recruits to the service appreciate this distinction and understand the need to establish priorities so that the service can be provided where it will be of most benefit. The staff have been encouraged to participate in discussions on these problems, and there seems to be a consensus of opinion growing that, contrary to previously held views, more effort should be made to establish children of secondary school age in the habit of regular attendance for examination and treatment. There may be a danger that an over-emphasis on younger children will result in treatment which is wasted by subsequent neglect.

Involvement of staff in discussions of this type, where their ideas can be critically examined and incorporated where appropriate into policy, undoubtedly contributes to job satisfaction. Every effort must be made to make the work interesting and stimulating so that the staff recruited are retained.

PREVENTIVE DENTISTRY

In April the county council adopted a policy in favour of fluoridation of the water supplies. This is a most important decision since implementation of this policy would do more to improve the dental health of the children of the area than the authority's dental services can ever achieve. However, the decisions of other local health authorities and certain of the water boards will prevent fluoridation except for a minority of those who could benefit. It is hoped that re-organisation of the administrative structure of the authorities involved in 1974 will lead to more rational arrangements for the implementation of fluoridation. Negotiations are proceeding where possible, and it is hoped that the first scheme will be in operation early in 1973.

Dental treatment as normally carried out does little to prevent disease and efforts are being made to introduce new methods which will reduce the incidence of dental decay. Rinsing the mouth with a fluoride solution has been shown to have a significant effect, and a suitable solution has been made available for patients to use at each visit to the clinics. It is interesting that some staff have been reluctant to adopt this departure from traditional practice and it is clear that training programmes will be required not only to provide information on recent research but also to attempt to alter attitudes so that new methods are actually used.

TRAINING

Two members of staff obtained a diploma in dental public health during the year. This newly instituted qualification has already played a major part in raising the standards of local authority dentistry and perhaps the time will come when all senior staff will be expected to have a postgraduate qualification. The progressive policy of the county council in providing further training is greatly appreciated by the dental staff, and it will result in a group of trained and committed dental officers who are able to make an important contribution to the changes which will follow re-organisation of the services in 1974.

The development of preventive dentistry as well as improved treatment techniques is producing a need for further training of more junior staff, particularly for those who have been qualified for some time. They are the people who in fact carry out the bulk of the treatment, and their needs must not be forgotten in the emphasis on the needs of senior and administrative officers.

RESEARCH

Improved standards of postgraduate education allow not only the introduction of a better standard of service but also the opportunity to carry out useful research, particularly in the field of epidemiology. A trial of a preventive programme has been started which includes the supervised topical application of a fluoride solution with toothbrushes. This method has been in use in Scandinavia for some years, and it has the advantage that the application can be supervised by non-professional manpower. The children can also be instructed in oral hygiene, and the supervisor can check that they are brushing in the correct manner. At the time of writing the scheme has been in operation for a year and has been shown to be feasible. An estimate of the effectiveness cannot be made until the children have been re-examined and their dental health compared with the control group.

Three other projects are in progress. A survey has been made of the treatment needs of a sample of patients attending the clinics in a four-week period. Preliminary analysis of the data suggests that previous figures for treatment need may have been underestimated. The information will provide a useful basis for planning work-loads and manpower requirements.

There has been increasing dissatisfaction with the usual methods of dental heath education and a study is being made of a group of secondary school children to discover more about the reasons why some of them attend regularly for treatment while others only attend when they have toothache. It is necessary to improve our understanding of the social processes involved before we can hope to intervene successfully and bring about a wider utilisation of the services by this important age group.

Amongst the preventive measures recently developed is a method of sealing the biting surfaces of posterior teeth so that they are protected from decay. It is too soon to know whether the sealant should be applied in every case, and a trial of the technique is being started which will help to answer this question.

All these studies are being carried out under careful statistical control, and it is hoped that reports will be published in due course.

OPHTHALMIC SERVICE

Work in the ophthalmic service has continued normally during 1971. Statistics elsewhere show the volume of work undertaken.

During the year greater emphasis has been placed upon the early ascertainment of visual acuity in infants suspected of amblyopia or early onset of squint. It is proposed that an orthoptist should spend one or two sessions per week in assessing the acuity of such cases referred by the ophthalmologist. This is exacting work but may well prove profitable if the development of intractable amblyopia can be prevented in these patients, coupled with the early application of orthoptic treatment.

The south-eastern quadrant of the county has been fortunate in the opening of the new Leighton district general hospital near Crewe. This provides an up-to-date ophthalmic unit for both in- and out-patients with a self-contained orthoptic department which will greatly facilitate the treatment of squint cases both orthoptically and surgically. This is the precoursor of the integration of the medical services—which in Cheshire has been a fact for many years due to the policy of appointment of county ophthalmologists who have held hospital appointments and thus been able to admit patients freely for treatment.

Attendances in the orthoptic department during the past year numbered 1,762. These patients are largely drawn from the county ophthalmic clinics. It is considered by your ophthalmologists that ophthalmic cases amongst schoolchildren are best treated in local clinics where adequate supervision of follow-up is ensured by the health visitor or clinic nurse.

A word on contact lenses would not be out of place due to the growing demand for this appliance amongst schoolchildren. This appliance has clinical application in infants with aphakia, unilateral aphakia following trauma, corneal opacities, and the higher degree of myopia. In all these conditions greatly improved visual efficiency may result, and the patients may justifiably be provided with lenses under the N.H.S. arrangements. Lenses are also justified in certain sporting occupations when undertaken seriously. There is also an increasing number of pupils who require lenses for purely cosmetic reasons and in these cases the patient must pay for this expensive item. It should be stressed that accurate fitting of the lens is most essential; it is ill advised to purchase them indiscriminately and often when this is done the lenses are not comfortable to the wearer.

Lectures have been given to the health visitors and clinic nurses on ophthalmic problems which affect children in particular. I would express the thanks of the ophthalmic surgeons to the nursing staff and to the orthoptists for their help in the clinics.

ENVIRONMENTAL HEALTH

SCHOOL SANITATION

Responsibility for public health and food hygiene inspections of schools throughout the county was transferred from the school medical officers to the county public health officer in 1968.

The aim is to achieve an annual inspection of all county schools. Inspections are of a general nature covering all aspects of public health and food hygiene. Particular attention is paid to sanitary accommodation and hand-washing facilities, also food hygiene in connection with the school meals service.

Legal standards are provided by the Standard for School Premises Regulations 1959, and the Food Hygiene (General) Regulations 1970.

A report is made on each school indicating how it measures up from a public health standpoint, and deficiencies and other contraventions of the regulations, together with other items regarded as requiring early attention, are underlined. As each educational division is completed the compiled reports together with a divisional report are submitted both to the director of education and to the county architect. By the end of 1971 all schools had been inspected and reports prepared on at least two occasions by the county public health officers. The third round of inspections is now in progress.

A comprehensive report on the initial survey of schools carried out during 1969-70 was given in Health Services 1970, details of conditions found were summarised and the following conclusion was reached:

> "From this report it will be seen that a great amount of work is necessary to bring the county schools generally to the required public health standard. The only solution would appear to be the provision of adequate finance to permit a phased programme to be carried out over a period of years, otherwise there is a danger that very unsatisfactory conditions will continue for many years."

During 1971 discussions took place with the director of education and additional detailed information was provided. The director of education pointed out that the problem was one of finance, insufficient money being allocated by the Department of Education and Science for this purpose. This is the reason for the apparent slow progress in this field.

However, it was agreed that the reports prepared by the county public health officers would ensure that the money available for improvements to school sanitation would be spent in the most advantageous manner, and would be of great assistance in formulating future programmes for improvements and up-grading of school premises.

SPECIFIC MATTERS OF FOOD HYGIENE

The county public health officer maintains close liaison with the officers operating the school meals service.

The code of practice on kitchen hygiene which was prepared jointly by health and education departments is now completed. A copy has been issued to all school kitchens and other county catering premises for information and reference.

A code of practice on pre-cooked frozen food is, at the time of writing this report (March 1972), in the course of preparation by the health department. This is in anticipation of the proposed pre-cooked frozen food pilot scheme which is to be launched by the school meals service in the autumn of 1972.

In the early part of 1971 a study was made into cooking by micro-waves. The recommendations which were made were implemented, resulting in cooked meals being available at one College of Further Education where otherwise they would not have been.

The food hygiene requirements in relation to the proposed code of practice for the construction and equipment of food premises have been circulated and the preparation of this code is still proceeding.

MILK IN SCHOOLS SCHEME

By virtue of the Education Milk Act 1971 only infant children now receive milk under this scheme. There is, however, provision in certain circumstances for a medical certificate to be issued by the school medical officers so that individual children between the ages of 7 and 11 years may receive school milk. From a public health point of view there can be no doubt that the "milk in schools" scheme has played an important part in improving the health of the nation.

Any new supply of milk proposed for a particular school is first referred by the director of education to the health department for approval.

As a result of a suspected food poisoning outbreak at one of the rural schools supplied with untreated (raw) milk, arrangements were made for the school meals vehicle to deliver pasteurised milk to the two rural schools previously receiving untreated milk. Thus all county premises now receive a supply of pasteurised milk which is of course a "safe" milk from the bacteriological standpoint.

No school in the county was without a supply of liquid milk at any time during the year with the exception of the rural school mentioned above which for a short period immediately following the outbreak received powdered milk.

During 1971 sampling of all school milk supplies in the course of retail delivery to schools throughout the county continued. With the exception of the 20 primary schools in Crewe where the borough health department carries out regular school milk sampling by arrangement with the county medical officer, all the schools in the administrative county are sampled by the county health department and each school is visited at least once each year.

A total of 812 milk samples was taken during 1971, 746 pasteurised and 17 untreated (raw) milk samples being taken by the county milk sampling officers and 49 pasteurised milk samples by the Crewe public health inspectors.

Sixty samples failed the methylene blue test (for cleanliness and keeping quality). Two large "out of county" dairies who supply a number of the schools in the northern part of the county were involved with 30 of the methylene blue test failures. The remainder of the failures were fairly uniformly spread amongst other suppliers. Correspondence and discussions took place with the dairy managements of the two dairies and in one case a representative visited the department to discuss his problems with the county public health officer. Repeat sampling indicated an improvement with regard to these supplies.

The 17 "untreated" (raw) milk samples taken before these supplies were replaced by pasteurised milk were also subjected to brucella cultural examination and to biological

examination for brucellosis and tuberculosis and all proved to be negative, as did 20 dealer samples and 9 group samples taken from the two herds involved.

The efficiency of the washing of school milk bottles at the doiries licensed by the county council was checked by the collection of 211 washed school bottles from these dairies when the sompling officers were visiting for the purpose of other sampling. All the bottles submitted for examination were reported as satisfactory with the exception of 5 which were reported as being fairly satisfoctory ond 5 which were unsatisfactory.

It is thus seen that o considerable amount of work is carried out to try and ensure that the whole of the 41,150 or so pupils ottending the 577 county primary schools and 59 non-maintained schools who take school milk receive a food which is clean and free from all pathogenic organisms ond delivered in clean undamaged containers.

SCHOOL SWIMMING POOLS 1971

Bathing facilities for school children are provided at public pools, at privately-owned pools, or at school pools. The public and private pools are supervised by the appropriate district council, but in the case of school pools these are supervised by the county staff.

The advantages of having a school pool are obvious and the very high proportion of children who con swim at the schools which have their own facilities speoks for itself.

During the year one additional enclosed learner pool, which will olso be used for hydro-theropy purposes, was completed at the Neston Junior Troining Centre. The money to build this was raised by a local voluntary committee of seven called "SPLASH" (Swimming Pool Launching Appeal for School for Handicapped Children) and the county council made a substantial contribution to the project. Every congratulation must be given to the committee for pursuing their aims and raising the necessory money so thot the pool was built in the comparatively short period of 3 years from the formation of the committee.

There are now thirteen schools in the county with their own pools. Schemes to build three further learner pools ore well advanced, and several schemes to provide swimming pools at secondary/grommor schools, which will also be used by locol organisotions and be operated jointly with the appropriate district council, are under active consideration.

The current policy with regord to learner swimming pools at primary schools was decided by the Finance and Generol Purposes Sub-Committee, on 15th September 1969, when it was agreed that oll proposols for the provision of leorner swimming pools ot primory schools would be considered on their merits subject to certain conditions, including approvol by the county medical officer.

Regulor routine visits by the county public health staff were made in 1971 during the period when the pools were in use.

Samples for bacteriological examination were taken and submitted to the Public Health Laboratory Service for examination. Normally three samples were taken on each occasion, one each from the inlet, outlet and centre sections of the pools.

A total of 305 water samples was taken during 1971, a slight increase on previous years. Only two of these were reported as having a high plate count. The overoll picture was very satisfactory. Difficulties with regard to water conditions arise from time to time and these problems are resolved by the county public health officers and the person responsible for pool maintenance at the school.

No outbreaks of illness or foot infection or other conditions associated with the use of swimming pools have been reported at schools having or using school pools.

An article on public health safeguards for school swimming pools was provided by request, for publication in the CCA Gazette during the year, and in the latter part of the year a booklet was produced by the department on "Swimming Pool Maintenance—a code of practice for public health safeguards." This consolidated the instructions and advice given by the county public health officers to the operators of school swimming pools, and copies have been made available to all the schools having pools.

SCHOOL MEDICAL INSPECTION RETURNS

Year ended 31st December 1971

PART I

Medical Inspection of Pupils attending Maintained Primary and Secondary Schools

TABLE A—PERIODIC MEDICAL INSPECTIONS

	PHYSICAL CONDITION OF PUPILS INSPECTED				PUPILS FOUND TO REQUIRE TREATMENT (EXCLUDING DENTAL DISEASES AND INFESTATION WITH VERMIN)		
Age Group Inspected (by year of birth)	Number Examined	Satisfactory	Unsatisfactory	Number not warranting Medical Examination	For Defective Vision (excluding Squint)	For any other Condition recorded in Part II	Total Individual Pupils
1967 and later	1849	1849	—	3	39	155	180
1966	8805	8803	2	104	219	1076	1202
1965	3913	3910	3	3	111	511	578
1964	2252	2250	2	56	88	291	352
1963	1350	1349	1	4	68	153	199
1962	776	776	—	8	57	74	122
1961	716	716	—	164	56	75	123
1960	1572	1571	1	1202	57	78	129
1959	1019	1016	3	1019	52	78	121
1958	338	338	—	68	24	25	44
1957	581	581	—	990	55	47	92
and earlier	2193	2193	—	1570	77	96	162
TOTAL	25364	25352	12	5191	903	2659	3304

The physical condition of 99.95 per cent of the total number of pupils examined at periodic inspections was considered satisfactory.

TABLE B—OTHER INSPECTIONS

Number of Special Inspections	911
Number of Re-Inspections	4552
TOTAL ...	5463

TABLE C
INFESTATION WITH VERMIN

(i)	Total number of individual examinations of pupils in schools by the school nurses or other authorised persons	276,570
(ii)	Total number of individual pupils found to be infested	5,926
(iii)	Number of individual pupils in respect of whom cleansing notices were issued (Section 54 (2), Education Act 1944)	4,929
(iv)	Number of individual pupils in respect of whom cleansing orders were issued (Section 54 (3), Education Act 1944)	747

PART II

Defects found by Periodic and Special Medical Inspections during the year

Code	Defect or Disease		PERIODIC INSPECTIONS Entrants	Leavers	Others	Total	Special Inspection
4	Skin	T	279	30	57	366	9
		O	328	20	60	408	17
5	Eyes:						
	(o) Vision ...	T	516	132	255	903	152
		O	1084	126	348	1558	224
	(b) Squint ...	T	358	6	41	405	9
		O	246	12	47	305	23
	(c) Other ...	T	27	3	10	40	2
		O	39	—	10	49	2
6	Eors:						
	(o) Heoring ...	T	138	9	34	181	24
		O	785	32	115	932	100
	(b) Otitis Media	T	95	5	9	109	5
		O	261	8	41	310	4
	(c) Other ...	T	39	—	8	47	1
		O	36	1	10	47	—
7	Nose & Throot ...	T	351	21	62	434	26
		O	809	36	102	947	21
8	Speech	T	273	5	24	302	27
		O	555	6	27	588	34
9	Lymphatic Glonds	T	9	1	2	12	—
		O	130	2	19	151	3
10	Heort	T	39	2	6	47	4
		O	189	14	27	230	15
11	Lungs	T	147	20	32	199	9
		O	384	20	74	478	42
12	Developmentol:						
	(o) Hernia ...	T	43	—	6	49	—
		O	47	1	3	51	3
	(b) Other ...	T	71	2	17	90	4
		O	267	3	27	297	6
13	Orthopoedic:						
	(o) Posture ...	T	9	3	5	17	2
		O	48	2	14	64	3
	(b) Feet ...	T	198	11	54	263	12
		O	266	11	55	332	13
	(c) Other ...	T	77	10	11	98	3
		O	144	12	15	171	7
14	Nervous System:						
	(o) Epilepsy ...	T	21	6	6	33	9
		O	37	6	17	60	16
	(b) Other ...	T	15	4	4	23	1
		O	110	8	31	149	15
15	Psychological:						
	(o) Development	T	16	2	17	35	13
		O	316	16	123	455	105
	(b) Stobility ...	T	34	2	20	56	26
		O	533	16	96	645	67
16	Abdomen ...	T	48	8	6	62	1
		O	90	15	21	126	6
17	Other	T	144	8	30	182	8
		O	312	27	99	438	33

T—Requiring Treatment O—Requiring Observatian

PART III

Treatment of Pupils attending Maintained Primary and Secondary Schools

TABLE A—EYE DISEASES, DEFECTIVE VISION AND SQUINT

	Number of cases known to have been dealt with
External and other, excluding errors of refraction and squint	418
Errors of Refraction (including squint)	11507
Total ...	11925
Number of pupils for whom spectacles were prescribed	3472

TABLE B—DISEASES AND DEFECTS OF EAR, NOSE AND THROAT

	Number of cases known to have been treated
Received operative treatment:	
(a) for diseases of the ear	82
(b) for adenoids and chronic tonsilitis	368
(c) for other nose and throat conditions	49
Received other forms of treatment	181
Total ...	680
Total number of pupils in schools who are known to have been provided with hearing aids:	
(a) in 1971	17
(b) in previous years	215

TABLE C—ORTHOPAEDIC AND POSTURAL DEFECTS

(a) Number of pupils known to have been treated at clinics or out-patient departments	661
(b) Pupils treated at school for postural defects	—
Total ...	661

TABLE D—DISEASES OF THE SKIN

(excluding uncleanliness, for which see Part I, Table C)

	Number of cases known to have been treated
Ringworm—(a) Scalp	—
(b) Body	—
Scabies	94
Impetigo	92
Other skin diseases	235

TABLE E—CHILD GUIDANCE TREATMENT

Number of pupils receiving treatment at Child Guidance Clinics	996

TABLE F—SPEECH THERAPY

Pupils treated by speech therapists	2594

TABLE G—OTHER TREATMENT GIVEN

Pupils with Minor Ailments	1986
Pupils who received B.C.G. vaccination	9771
U.V.L. treatment	195
Total ...	11952

PART IV

Dental Treatment carried out by the Authority

Attendances and Treatment	Ages 5 to 9	Ages 10 to 14	Ages 15 and over	Total
First visit	19656	16024	2625	38305
Subsequent visits	30243	34654	6420	71317
Total visits	49899	50678	9045	109622
Additional courses of treatment commenced	3196	2667	390	6253
Fillings in permanent teeth ...	19024	39592	8709	67325
Fillings in deciduous teeth ...	23606	1624	—	25230
Permanent teeth filled	14791	34288	7795	56874
Deciduous teeth filled	20734	1404	—	22138
Permanent teeth extracted ...	1492	6546	1176	9214
Deciduous teeth extracted ...	17840	5485	—	23325
General anaesthetics	6336	3342	350	10028
Emergencies	3200	1437	287	4924
Number of pupils X-rayed				4543
Prophylaxis				16434
Teeth otherwise conserved				1827
Number of teeth root filled				197
Inlays				19
Crowns				145
Orthodontics				
New cases commenced during the year				542
Cases completed during year				295
Cases discontinued during year				70
Number of removable appliances fitted				793
Number of fixed appliances fitted				42
Pupils referred to Hospital Consultant				113
Dentures				
Pupils supplied with F.U. or F.L. (first time)	—	5	16	21
Pupils supplied with other dentures (first time)	6	75	37	118
Number of dentures supplied ...	5	70	65	140
Anaesthetics				
General anaesthetics administered by Dental Officers				1745

Sessions

Treatment (including auxiliaries)	15212
Inspectian	892
Dental health educatian (including auxiliaries and hygienists)	144
Administratian	348

Clinics

Fixed				Mobile		
With 1 Surgery	With 2 or more Surgeries	Total available	In use	No. of Clinics Available	No. of Clinics In use	Sessions Worked
41	17	76	73	1	1	145

NUMBER OF HANDICAPPED PUPILS EXAMINED IN SCHOOL

Defect	New Cases	Re-exams
Blind	—	—
Partially Sighted	5	8
Deaf	—	3
Partially Hearing	2	38
Delicate	21	37
Diabetic	4	7
E.S.N.	20	147
Epileptic	17	32
Maladjusted	7	7
Physically Handicapped	31	89
Speech Defect	—	4

ATTENDANCES OF SCHOOL CHILDREN AT COUNTY CLINICS 1971

Ear, nase and thraat	1875
Ophthalmic	12742
Paediatric	340
Child guidance (psychiatrist	2473
Audialagy	220

NUMBER OF CHILDREN OF SCHOOL AGE ON CLINIC REGISTERS 31.12.71

Cerebral palsy	556
Speech therapy	1890

HANDICAPPED CHILDREN 1970-71

On Registers of Special Schools

	Boys	Girls	Total
Blind	26	18	44
Partially sighted	10	11	21
Deaf	36	39	75
Partially hearing	23	12	35
Delicate, etc.	43	12	55
Educationally subnormal	442	299	741
Physically handicapped	104	81	185
Maladjusted	66	16	82
Epileptic	14	7	21
Speech defect	2	3	5
Total ...	766	498	1264

Resident at Further Education Centres

	Boys	Girls	Total
Physically handicapped	14	1	15
Blind	3	—	3
Deaf	2	—	2

PERIPATETIC TEACHING OF THE DEAF

Number of children seen		4383
At clinics	2068	
At school	1629	
At hame	686	
New cases admitted		510
New cases seen but not admitted		198
Tatal clinic sessians		748
Discharges		339
Hearing aids issued		17
Medresca (N45)	8	
Past-aural Medresca	8	
Cammercial	1	
Children with aids left school		8
Ceased using aids		2

Peripatetic Teachers of the Deaf—Case Loads on a selected day

Case Load:	Miss Taylor	Miss Starkie	Mr. Williams	Mr. Perry	Mr. Buckingham	Mr. McDonough
Canductive	192	153	330	291	578	236
Perceptive	12	17	69	10	34	110
Mixed	5	6	35	3	38	23
High Frequency	7	7	11	2	19	42
Monaural	5	12	31	14	55	47
Unclassified	28	14	4	15	12	—
Tatal	249	209	480	335	736	458
No. af children with hearing aids:						
Medresco	14	16	47†	6	52†	48†
Commercial	1	11	4†	1	8†	7†
No. of children seen mare than ance monthly	12	13	5	9	8	50

† Including partially hearing units

SPEECH THERAPY

Categories under treatment 31.12.71:

Articulatory disorders	1368
Stammerers	216
Cleft palates	61
Language disorders	387
Others	22

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